FUTURE VALUE Money Lessons For Life

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FUTURE VALUE

MONEY LESSONS FOR LIFE

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FUTURE VALUE

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INTRODUCTION - MISSING PIECES

Are you young? Have you recently had a milestone event like a graduation? Were you given this book in recognition of your milestone? If you answered yes to these questions, congratulations – you're my target market. (If you didn't answer yes, you're still valued, so please keep reading.)

Whether you graduated recently or some time ago, in your twelve or sixteen or twenty years of formal education, how much time was spent teaching you about money? If you're like most graduates, the answer is little to none.

It costs roughly \$150,000 to take a child from pre-K through high school. It can cost that much again to earn a college degree. Some claim noble reasons for all this education – love of learning, personal growth, etc. The main reason is economic. Parents spend all this money giving their children a good education so those children will get good jobs. And the main indicator of a good job is how much it pays. **You learn to earn.**

There is nothing wrong with wanting your children to become well-educated and to have good-paying jobs in adulthood. Parents, politicians, and school systems agree on this point. But there's a problem. While an enormous amount of time, effort, and money has been spent to enable you to earn money, almost nothing has been spent to teach you about money itself or what to do with it once you earn it. **Money is a tool. As with any tool, it makes no sense to teach someone how to** *make* **the tool if you don't also teach them how to** *use* **the tool.**

Parents and schools have been shortsighted when it comes to teaching you about money. In some cases, the

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parents assume the schools are teaching you, and the schools assume the parents have it covered. In many cases, neither the parents nor the schools feel confident enough on the subject of money to properly teach their children about it.

Teachers don't become teachers for the money; they become teachers for the love of learning. Some schools may believe that teaching about money puts too much emphasis on money at the expense of more "worthy" subjects like science and math. Teaching about money would acknowledge the economic reasons for education, which might make some educators uncomfortable.

There's another, more pressing reason schools don't teach about money. Standardized testing has become the measure of a school's effectiveness. Schools now teach to the test. If a subject like money isn't being tested, it won't be taught. If colleges encouraged or even required incoming students to take money classes in high school, money classes would start being taught there. Since most high school students hope to attend college, colleges can influence high school curricula more than parents, teachers, or politicians.

Everyone would benefit if new college students had some basic money education before arriving on campus. **Young people today have more access to money and less knowledge about money than any previous generation.** An eighteen-year-old with a new credit card, ample student loans, no money education and no supervision is dangerous. That combination often leads to parents paying off huge credit card debts, a college that loses a student, and a young person who loses an education but gains a mountain of debt. A cycle of money mistakes begins that may last a lifetime. It wouldn't take much to give students the knowledge they need about money. A one-semester class in 8th, 10th, and 12th grades could give them the knowledge they need, and it would only consume about 2% of their total school time. It would be a small investment with a big return.

Until such changes occur, a book like this will have to try to fill the gap.

You'll probably spend forty or more years working before you retire. Those forty years are on top of at least a dozen years you spent in school. Most people devote the single biggest chunk of their time from ages 5 to 65 learning job skills and earning money. If these people (including you) learned about money early on, they would likely have to work less, and they would accumulate more wealth while working. They would also better understand money's possibilities and its limitations, avoiding a lot of the crises adults bring on themselves.

Even if you're not young, you're never too old to benefit from these lessons. Their future value will be determined not just by how long you can apply them, but how well.

HOW MONEY SERVES YOU

When Yvonne and Quentin got married, one of their first goals was to buy a house. They calculated how much house they could afford, based on incomes and existing debts. They calculated their down payment and how much they needed to save monthly to accumulate it within three years. They then opened a separate savings account at their bank just for their down payment.

Yvonne and Quentin were disciplined about saving for their down payment, and within three years they had saved enough. They had also studied the real estate market in their area for those three years. They knew what they could afford in their area. They eventually found a three-bedroom, two-bath, Cape Cod house on a quiet street with good schools nearby.

There was the usual back-and-forth between buyer and seller about price, repairs, maintenance, closing costs, etc. Everyone eventually agreed on all these issues, and the closing itself went smoothly. Three weeks later, Yvonne and Quentin hosted their first party in their new home for all the friends and relatives who helped them move from their cramped apartment.

Lots of moving parts had to work well together for Yvonne and Quentin's dream of home ownership to come true. Wife and husband worked as a team to sacrifice, save, and find just the right property. Family and friends were supportive during times when it seemed the dream wouldn't come true. Bankers, realtors, and attorneys all had to coordinate their efforts. Finally, buyer and seller had to come to agreement on many different aspects of the sale – disagreement on any of which could have killed the deal. There was another moving part to Yvonne and Quentin's home buying adventure that was absolutely essential; yet no one gave it a thought because they didn't have to. That ignored moving part was money.

Money serves four basic functions. Here are those functions and how they worked for Yvonne and Quentin:

Unit of account – Money can express the market value of different goods and services. If something can be valued in money, its value can be compared to other things that can be valued in money. Even your time can be valued in money, so you can calculate how much time you must pay to get something you want.

The market value of the house Yvonne and Quentin wanted was expressed in money (in this case, dollars). Money could accurately express what both buyer and seller thought the house was worth, so they knew how far apart they were when negotiating. Imagine trying to value this house in livestock, steel, or even your time. When trying to value something, money is the common language spoken and understood by everyone.

Store of Value – Wealth can be held in many forms (stocks, real estate, etc.), but **no form of wealth is as flexible as money.** Money can also be accumulated over time, with no upper limits and stored where only inflation can harm its value.

When Yvonne and Quentin were saving for their down payment, they knew exactly how much they had by checking their bank statement. The money was ready when they were. They didn't have to sell it or convert it. The only worry was if home prices increased while they were saving up their down payment. Inflation would have reduced the value of their money, weakening it as a store of value. They would have needed a bigger down payment if inflation raised home prices.

Medium of exchange – Without money, people would have to barter to exchange goods and services. **Money eliminates the need for a** *coincidence of wants*. Money encourages trade because people agree on its value and because it's widely accepted as payment for anything.

Yvonne and Quentin weren't saving money just to have money. They were going to exchange their money for a house. The seller didn't want to be paid in money just to have money, either. At some point, the seller would use the money from the sale to buy necessities and luxuries, possibly even another house.

A house is expensive. Yvonne and Quentin had only money as an acceptable form of payment. They had nothing that valuable to barter or exchange. They couldn't work directly for the seller, either. It would take too long, and they didn't have skills the seller needed. Even though money was the only acceptable payment method, Yvonne and Quentin needed more money than they had saved to make the deal.

Standard of deferred payments – Because so much of the modern economy is based on credit markets, money is critical for the stability of those markets. **Only money can be maintained in such a way that neither lenders nor borrowers stand to lose.**

Yvonne and Quentin worked hard and sacrificed to save up their down payment. Even so, their down payment was only ten percent of the cost of the house. They had to borrow the rest in the form of a thirty-year fixed-rate mortgage. No bank would make a loan for a large amount, with a payment schedule lasting three decades, if they weren't sure what they would actually be getting back. The bank that handled the mortgage first checked out Yvonne and Quentin to make sure they were good credit risks. Then they entered the loan amount, the interest rate, and the repayment period to calculate the monthly payment. The bank could approve the loan because they knew how they would be paid, how much they would be paid, and for how long they would be paid. No other method of payment but money would be as accurate, and accuracy is essential in such a deal.

Money served Yvonne and Quentin in many ways and very well. Money stands ready to serve you, too. You have to be careful, though. Just because money can serve you in certain circumstances, that doesn't mean it should.

Unit of Account Pitfall - Things that should not be valued in money or have their value compared to other things have it done because money is our default method of assessing value.

Store of Value Pitfall - The ability to store wealth through money can lead to a disconnection between the individual and other people and between the individual and God.

Medium of Exchange Pitfall - The ability of money to enable the exchange of goods and services can lead to goods and services that should not be valued in money being exchanged for money.

Standard of Deferred Payments Pitfall - By stabilizing credit markets, money makes credit more tempting and more available, leading to major financial problems for many.

MONEY ISN'T

Money Isn't the Cause

You don't work for money. You should work for two reasons. First, work gives meaning to your life by contributing; you provide society with needed goods and services. Second, you work to provide you and your family with all the necessities and a few luxuries.

Money has nothing to do with the first reason for working. If your work has no meaning, no amount of money can fill that void. As for the second reason, money is a medium of exchange. It enables you to convert your work into necessities, luxuries, and anything else money can buy.

Money Isn't (a) God

When money is desired for its own sake, the worship of money begins. The Bible mentions money more than any other topic because money is mankind's first choice as a substitute for the supernatural.

Wealth can create a delusion of self-sufficiency. We can come to believe we don't need other people and we don't need God. Such pride is considered a sin. It weakens the bonds of a society and weakens the bonds between individuals and God. Money is not evil. The material world is not evil; it is merely secondary to the spiritual world.

Money Isn't Power

It's easy to think money is power when we see people with money exerting influence on those without it. Money is the most obvious difference between the people, so we conclude money is the reason for the difference in power.

The ability to be controlled by people with money comes from a failure to control money in one's own life. You must understand money and have self-discipline about money. It will protect you from those who would use money to control you. Money is power against you only if you are under the power of money.

Money Isn't a Weapon

When people attempt to use money as a weapon, it's usually done by withholding money, not by providing it. To be vulnerable, you have to need money from others, and they control its flow.

This is not about earning an income. That money comes from a fair and voluntary exchange of labor. If you lose your job, you can still get another. This is about someone who receives money from others without giving something in return.

Money Isn't Character

Most wealthy people also possess high character. Most wealthy people in America made it through hard work and sacrifice. Their character is an asset and a large reason for their financial success.

Money isn't character, but it can reveal character. How people earn money and how they spend it reveals their priorities. Priorities reveal character. Someone of high character earns money honestly, saves it seriously, spends it carefully, and gives it generously. Man makes the money; money doesn't make the man, or the woman.

Money Isn't Happiness

Money can buy pleasure, but not happiness, in the same way that money can buy books, but not wisdom.

Several studies confirm certain correlations between money and happiness. It's harder to be happy when you're poor. Your ability to give is hampered and you're focused on survival. Once basic needs are met, more money barely moves the happiness meter. Buying more stuff brings short-lived pleasure, then disappointment. The disappointment of no happiness is compounded by the disappointment of less money.

Money Isn't Human

With the invention of money, we created the ability to quantify almost every aspect of life. Money enables us to have greater contact with the outside world, though largely on a superficial transactional basis.

We don't give of ourselves if it's easier to give money. We don't owe gratitude; we just owe money. Money greatly enabled and simplified transactions. A consequence is we can come to think of relationships as transactions. We try to put a price on everything, even those things that money can't buy.

MONEY IS

Money Is the Effect

We've become accustomed to spending money we haven't earned yet. As a result, we tend to see money as cause rather than effect. Effect follows cause. It's hard to see money as the effect of your work if the money is spent before the work to earn it has been performed.

At work, this misperception can create this mindset: If my boss would pay me more, I would work harder. This is backward. You must create value before you can receive value.

Money Is a Tool

Money used to destroy is a weapon. Money used to build is a tool - the greatest building tool ever devised.

Money is unsurpassed at building a future. When used properly, money does not deteriorate over time like most things we build. When properly used and managed, money becomes bigger and better over time. Money can build a future we can't even imagine today.

Money Is Dignity

The status that money may create isn't the same as dignity. Status is conveyed by other people to an individual. Dignity is conveyed by individuals to themselves.

Dignity is a synonym for self-respect. It must be earned by you, and it can't be taken away by others. Few things generate self-respect like a dollar earned through honest labor. The ability to accumulate money from earnings is a great source of dignity.

Money Is Freedom

Money spent can be a prison, but money saved can be freedom. Smaller financial liabilities and larger financial assets equal greater freedom. Money that generates an income can free you from the task of generating an income. Money's ability to make money is also greater than yours.

The time may come when you don't want to work. The time will almost certainly come when you can't work. Money can give you the freedom to stop working when that time comes. Money can also give you the freedom to leave on your own terms.

Money Is Hope

Hope is the ultimate motivator. Hope enables you to work hard, delay gratification, set priorities, and remain disciplined. Hope motivates you to act in ways that enable the accumulation of wealth.

In addition to hard work, sacrifice, determination, and optimism, many of your hopes will require money to be fulfilled. Your hopes will require money because they will require outside assistance to be fulfilled. Money motivates the outside world to provide that assistance.

Money Is Love

Money is excellent as an *expression* of love.

Money is horrible as a *substitute* for love.

Money-is-love has no time frame. You can express love to those who have died by establishing a memorial fund for a cause they supported. You can express love in the present by the simple act of buying a gift for someone for no special reason. You can express love in the future by providing money in the future to help those who will live there, even if you aren't one of them.

Money Is a Mirror

Many people contend that how we allocate our time reflects our priorities and our character. It's a valid contention, but it doesn't go far enough.

How we allocate our money offers an even more accurate reflection. While both time and money are valuable resources, your money balance is known, while your time balance is not. This difference makes a unit of money more valuable than a unit of time. How you allocate the more valuable resource says the most about your priorities and who you are.

MONEY MOVER I – GREED

In Southeast Asia, there is an effective way to capture monkeys. A hole about an inch-and-a-half in diameter is bored into a coconut. The milk is drained, and fruits and nuts monkeys like are inserted into the coconut. The coconut is then placed where it can be observed.

Before long a monkey gets the scent. The monkey inserts its hand into the coconut and grabs a handful. The monkey's open hand fits into the hole; the monkey's fist, filled with food, doesn't fit. The monkey can't run and carry the heavy coconut. A tossed net seals its fate.

The monkey had time to let go of the food, remove its hand and run away before being caught. But it didn't. Greed clouded its judgment, even to the point of risking capture. It's a trait they share with humans.

Greed is an excessive desire to acquire or possess more than what one needs or deserves. Avarice is extreme greed for material wealth.

Brain studies show financial rewards stimulate the nucleus accumbens. The nucleus accumbens is one of the most primitive parts of our brain. Almost all animals have one. Generosity stimulates the posterior superior temporal sulcus. These two parts of the brain can't function at the same time. We can be greedy or we can be generous, but not simultaneously.

Greed is one of our most primitive emotions because it comes from one of the most primitive parts of our brain. Generosity is one of our highest emotions because it comes from a highly developed part of our brain.

Our greedy part has an unfair advantage over our generous part. The nucleus accumbens releases

dopamine, the pleasure chemical we crave. Generosity gives us warm fuzzies, but greed gives us a rush.

Even for generous people, when the stakes rise, greed can overpower generosity. Donating blood makes you feel generous. That feeling is worth more to you than \$50 you might receive if you sold blood. If the price rose to \$1,000, you would likely stop being so generous. You're willing to give away \$50 worth of blood, but not \$1,000 worth, even if it's the same blood.

There are several characteristics of money that make it useful in feeding greed:

- *Money is compact*. If the product of greed is money, millions can be stored on a few financial statements.
- *Money is anonymous*. Money can enable greed without evidence. Money doesn't reveal its owner or even its existence. Possessions can betray one's greed; money doesn't.
- *Money is precise*. Competition often stokes greed, especially competition to have the most. Money's precise value makes it easy to make comparisons and keep score.
- Money is portable. Cash is more portable than most items it can buy. Even cash is cumbersome compared to cyber-money. A mouse click or screen tap can move money quickly and easily to maximize greed.
- *Money is respectable*. If you become rich enough, people are willing to ignore many flaws, including greed. Sufficient wealth can buy respectability, which is why so many crave it.
- *Money is universal*. Money is the best tool for getting more money because people are so lured by it. One of the best ways to get rich without earning it is to appeal to the greed of others.

- *Money is insulating*. Greed often results from a desire to be insulated from the outside world. With sufficient wealth, you can insulate yourself from poor schools, neighbors, have-nots, and whatever else annoys you.
- *Money is multi-faceted*. A public display of charity prompts the public to disregard many transgressions. "Good Money" sanitizes "Bad Money." Goodwill buys protection from scrutiny.

Greed moves money, even if the greed is not for money specifically. Almost everything one could be greedy for can be bought. Whether money is the means to an end or an end itself, greed moves it.

Greed leads to wanting more than one needs. *Need* is subjective. If you grew up in extreme poverty, you might never feel you could be rich enough. You would always fear a return to poverty. **Greed is sometimes as much a psychological disorder as a sin.**

Greed is also fueled by confusing wants with needs. You wouldn't want to be accused of being greedy over something you merely wanted. But you can't be greedy over something you need. **Reclassifying a want to a need insulates you from the label of greed**, at least in your own mind.

Greed leads to wanting more than one deserves. *Deserve* is subjective, too. As with need, what you think you deserve may not match what others think you deserve.

What someone deserves is often determined by law. Greed can become so overpowering that the law is no longer an impediment. Greed is most harmful to others when someone is willing to cross that line.

Greed causes resources like money to move in only one direction - to the greedy person. Money in the economy is like blood in your body. It needs to circulate

to be useful. Greed takes money out of circulation and pools it where it serves no purpose.

Greed is unhealthy for the economy, but it's unhealthy for the greedy, too. They can never feel successful because whatever they have, it isn't enough. They will always want more.

They can't be happy, either. Happiness doesn't come from material possessions or wealth. It can come from generosity, but that avenue is blocked by their greed. The desire for success and happiness fuels most greed. But greed makes success or happiness impossible.

The greedy are like Tantalus, a king in Greek mythology. Tantalus was a son of Zeus and enjoyed great privilege. Despite such privilege, he fell victim to greed. He stole ambrosia and nectar from Zeus' table, brought it back to his kingdom, and revealed the secrets of the gods.

For his punishment, Tantalus was forced to stand in a pool of water with the branches of a fruit tree hanging just overhead. Whenever he reached for the fruit, the branches receded just out of reach. Whenever he bent down to take a drink, the water receded before he could drink.

To the greedy, the fruit tree is success; the water is happiness. They will be forever tantalized by them, yet will never attain them.



MONEY MOVER II – FEAR

How would a man from the Dark Ages, the 600-year period following the fall of the Roman Empire, perceive our society today? The first thing he might notice is almost everything that caused fear in his time is no longer a problem.

Talking with us, our visitor from the past might become dismayed. He might wonder why, after eliminating so many major fears, we've replaced them with so many minor fears. How could a few cases of the flu constitute a national emergency? He saw half a continent killed off by the plague. Why do people worry about the quality of a school lunch program? He lost children to starvation and malnutrition. Why do people worry about Social Security? He never knew anyone who lived past fifty. He might remind us of our progress and tell us to stop fearing things that don't merit fear.

Fear is an emotion experienced in anticipation of pain or danger. Fear is also an uneasiness of the mind. The first kind of fear is physical and instinctual. It's the fear you experience when you hear a sudden crash of thunder or step in front of an oncoming car. The second kind of fear, the kind that dwells in your head, is very different.

The first kind of fear, instinctual, is a healthy fear. Instinctual fear is a survival tool. Fear is an unpleasant emotion and you try to avoid it. Your desire to avoid fear helps you avoid harm.

The second kind of fear, the one in your head, is unhealthy fear. This fear is based on *thoughts* of potential future trouble. It is unique to humans because we are the only species that contemplates the future. It can consume your thoughts, paralyze you, cause you to act irrationally, and can even lead to phobias and paranoia.

The response to fear can take one of two paths – think of them as gut vs. head. Gut response is "Shoot first and ask questions later." Head response calculates the danger, and then develops an appropriate response. The gut response's advantage is speed; the head response's advantage is accuracy.

Instinctual fears require a gut response. Speed is primary because these dangers are immediate. Our body instinctively creates a gut response to instinctual fears.

Thought-based fears require a head response. The danger is not immediate and may not even exist. Our bodies still want to create a gut response because that's all it knows how to do. The head must override the gut response, assess the danger, and develop an appropriate action, if one is even needed. These fears are created in the head; it's the head's job to deal with them.

Here are some modern fears that relate to money:

- fear of change (and of the process of change)
- fear of uncertainty about the future
- fear of regression from current prosperity
- fear of making mistakes
- fear of failure on our part
- fear of missing an opportunity
- fear of loss of control over our lives
- fear of losing out to others
- fear of being exploited by others
- fear of the big disaster

Money-related fears are thought-based. They require a head response. A gut response to thought-based money fears is an invitation to financial disaster.

Once we have a stake in something, we worry about loss. The entire insurance industry is based on reducing risk of financial loss by transferring your risk to them. If you total all the insurance premiums you pay, you realize you pay a lot to avoid a potentially much bigger loss. **Insurance is a tool for controlling risk, but its greatest benefit may be as a tool for controlling fear.**

Once people begin to save and invest, they begin to worry about two things – the return *on* their money and the return *of* their money. If money is going into a bank, there is no worry about the return of the money.

People use banks for security for savings. Savings is defined as money set aside for the short-term, five years or less. Investing has a longer time frame. Investments typically generate higher long-term returns than savings; they also have higher short-term volatility. **Investing can create fears about the return on the money** *and* **the return of the money**.

Nothing scares retirees more than the thought of outliving their money. Most retirees are careful not to spend money at a rate that could cause them to run out. But they fear a drop in the value of the investments that can't be recovered before they need to sell them. This fear is the main reason retirees hold safe investments like bank CDs and government bonds.

Of all our money fears, one is justified but few people have. It's **fear of inflation**. Most people don't think about inflation's effects on their purchasing power.

When retirees fear a drop in the value of their investments, they limit themselves to investments that won't drop, but can't grow enough to offset inflation. They worry a drop in value will leave them with less money. Inflation guarantees they will have less money, as measured in purchasing power. It is fear more than greed that prompts people to move in and out of the stock market – especially out. Greed is less likely than fear to be harmful in market timing. **Greed is proactive** and can promote courage. **Fear is reactive** and is more typically the reason for moving in and out of the market, especially at the worst possible times.

Studies over more than two decades have measured the cost of fear selling. These studies showed that missing *only the best forty days* of market gains over a twenty-year period would reduce gains by *almost half*. Forty days was less than 1% of the total trading days during the periods studied.

Irrational fears of the mind have two major consequences – they reduce your chances of success in the future, and they reduce your chances for happiness in the present.

Fear of change, uncertainty, regression, mistakes, failure, missed opportunities, loss of control, losing, exploitation, and the big disaster can cause you to freeze. Potentially worse, these and other fears can cause you to act in ways that can be financially fatal. They can make you miserable in the present and even more miserable in the future.

MONEY MOVER III – LOVE

A child is born to a middle class American family in 2016. The parents are both thirty years old. If they're typical parents, they will spend roughly \$300,000 getting their child to voting age. A bachelor's degree at a public university will cost another \$400,000. If they're lucky, the expenses will end there.

These new parents knew raising a child would be expensive. They may have even seen these estimates of the cost. But they only know part of the cost.

If these parents took all the money they would spend on their child over the next 22 years and invested it at a 7% annual return, when they retired at age 67 they would have over \$3 million. That \$3 million is an opportunity cost. An opportunity cost is what you give up when you choose something else. A child carries a huge opportunity cost for the parents.

Throughout almost all of human history, parents had children out of self-interest. Children were their only old age security. Parents had many children, hoping one or two might survive and care for them in old age.

Today we can save and invest. We have professional, high-quality elder care. Having children isn't necessary for old age security. **Having children today is more** selfless; it's more an act of love.

Greed, fear, and love are all emotions that move money. Greed and fear are self-centered emotions. When they move money, it rarely benefits anyone. Love is a selfless emotion. When love moves money, it's almost always done to benefit others.

As stated before, money is excellent as an expression of love, but it is horrible as a substitute for

love. Money possesses no human characteristics. Money is incapable of substituting for our most human characteristic, love. Giving money instead of your love is like giving a clock instead of your time.

If you buy a gift for someone, you are using money as an expression of love. If you donate to a charity, you are using money as an expression of love. If you buy life insurance for the benefit of others, you are using money as an expression of love. If you use your money to benefit others, love is moving that money.

While money should never be used as a substitute for love, there is a financial component to some of our strongest expressions of love.

The payment of a dowry is a four-thousand-year-old practice. The wife provides financial assets to begin the marriage. One of its main purposes is to protect the wife against ill treatment by the husband or his family. The dowry system is still practiced in parts of south Asia.

Modern western marriages begin with a major financial component, too - the engagement ring. The ring symbolizes the partners' commitment, though it has also come to symbolize the financial strength of the groomto-be.

Because money can be an expression of love, it can also be misinterpreted as a measure of love. If you measure someone's love by how much they spend on you, you're misinterpreting money for love. The giver may then begin to misinterpret money for love, too. It's a short trip from misinterpreting money for love to substituting money for love.

There are four ancient Greek words for love: *eros*, *philia*, *storge*, and *agape*. Each is a different type of love, though all use money as an expression of love.

Eros refers to intimate or romantic love. The term *erotic* is derived from eros. Eros love burns intensely, though often briefly. The intensity of eros love can cloud judgment.

Under the spell of eros love, you might find yourself buying expensive gifts, taking trips, or providing financial support to a lover. These expressions of love can hurt your own finances when carried to extremes.

Eros love has a short life expectancy. When it dies, there are often regrets about money spent in the heat of the moment.

Philia love is often translated as brotherly love, friendship, or affection. The name *Philadelphia* comes from philia.

Aristotle divided philia friendships into three types. **Friendships of utility are typically transactional,** such as a buyer and seller. Money is a key component in these friendships; without money, the relationship would not likely exist.

Friendships of pleasure are based on the pleasure of another person's company. They are often based on a shared activity or experience. Reciprocity is a key component in these relationships. Money is usually a component only if it provides mutual benefit.

Friendships of the good are based on respect for another's character. This is the highest level of friendship, what some call true friendship. People willingly spend money on the other person. Recipients take care that givers don't give too much.

Storge love is a natural affection. It is also called familial love, especially the love between parents and children. It is also the love between committed partners.

Eros love does not evolve into storge love, though it might be replaced by it over time. Eros love is looking into each other's eyes; storge love is looking in the same direction.

Because storge love involves deep, long-term commitments, the financial commitments are also deep and long-term. Whether the commitment is to a spouse, a parent, or a child, it's one that can cover decades or even a lifetime. Storge love often carries the biggest price tags, but also has the highest potential return.

Agape love is considered the highest form of love. It is the love of God for man and of man for God. It is also the love that is reflected in charity. Agape is a selfless love, one committed to the well-being of another.

When people give to their place of worship, they express agape love with money. When people put money in a Salvation Army kettle or directly into the hands of a homeless person, they express agape love with money.

Because agape love is the highest love, money is not given with any expectation of reciprocity or recognition. It is not given out of any sense of duty or obligation. Agape love is the highest love, and **money moved by agape love is money serving its highest purpose.**

Love makes you selfless and brave. Where money is concerned, love is a powerful antidote to greed and fear. Money moved by love rarely moves in the wrong direction. It also prevents a lot of money from moving in the wrong direction.

FUTURE VALUE

SHARE/SAVE/SPEND

The word *share* has many meanings in the English language. It's a portion of something; it's often used to mean an equitable portion. Ownership of a company is divided into shares of stock; owners are shareholders. It can mean to take part in something. *Share* has positive connotations, unless it's your parents commanding you to share your toys with siblings.

All the major religions endorse sharing. One of the five pillars of Islam is Zakat, which is charitable giving, especially to the poor. In Judaism, *Tzedakah* is the obligation to be charitable. In Hinduism, one of the ten Niyamas, or observances, is *Dana*, the practice of charity. Buddhism professes that wealth provides four kinds of happiness, one of them happiness from sharing wealth. The Bible has numerous passages urging Christians to share what God has provided them. Corinthians II reminds us: "God loves a cheerful giver."

Greed involves taking more than your fair share. Greed is considered sinful by all these religions.

Greed follows the law of diminishing returns. An extra dollar acquired through greed has little value. In contrast, sharing has no diminishing returns. Sharing feels as good the thousandth time as it does the first.

The best antidote for greed is sharing. Greed hurts everyone, but no one more than the greedy. They rarely gain financially in the long run, and they sacrifice almost everything money can't buy in the interim. Sharing helps everyone, perhaps no one more than the person sharing.

Many people put sharing last instead of first. They want to see what they will have left before deciding what they will share. When sharing is left for last, there will never be money left to share.

Many people wait to see what they will have before deciding what they will share. But all the faiths remind us that God waits to see what we will share before deciding what we will have.

Even if you don't believe in God, sharing is therapeutic. Money can cause us to disconnect from our fellow man; sharing it helps us reconnect. Even if you're ruled by self-interest, sharing still makes sense. People prefer doing business with people who put others first. If nothing else, sharing is good for business. **First you give, then you get, whether it's personal or business.**

If sharing is the antidote for greed, saving is the antidote for fear.

There are many different kinds of money fears. All these fears really come down to one – we fear we won't have money when we need it. Based on the high debt and low savings of most Americans, these money fears are well-founded.

The best way to reduce the fear of not having money when you need it is to save money for when you do need it. Saving more does require spending less. Spending less is the price of reducing money fears. The ability to reduce your money fears is at least within your control – it merely requires some self-discipline.

Fear incites panic; panic leads to mistakes. Saving money reduces fear; it also reduces money mistakes that increase fear and trigger panic, leading to more money mistakes and even more fear and panic.

In a financial emergency, using savings can be the best option. Borrowing money is costly; it also adds the stress of paying off additional debt. Using savings may mean not having to sell valued possessions during an emergency. Selling inherited jewelry would be bad; selling your car would be a catastrophe.

Saving money also proves you can live below your means. Living below your means makes a pay cut easier to handle. Savings can help you endure a period of unemployment. Simply knowing you have the discipline to save builds confidence and reduces your fear of the unexpected. You believe you can handle anything.

By sharing and saving first, you enable guilt-free spending. Your first spending priorities are necessities and obligations – food, mortgage, utilities, medical, transportation, etc. Even with necessities, you have some control over how much you spend. By taking care of sharing, saving, and necessary spending first, you may have less discretionary spending, but you'll actually enjoy it more. You'll replace quantity with quality, both in what you buy and the process of buying it.

So, how much should you share, save, and spend? A good share-save-spend ratio is 10/10/80. (Saving here also includes long-term investing.) If you're not sharing or saving anything now, start by moving 1-2% of your income into each category. Raise it 1-2% each year. In just a few years, you'll have built a great immune system to greed and fear, the two biggest threats to your financial health.



THE GOOD STEWARD

The *Broken Windows Theory* was first introduced in an article titled "Broken Windows", which appeared in *The Atlantic Monthly* in 1982. The title comes from the following example:

"Consider a building with a few broken windows. If the windows are not repaired, the tendency is for vandals to break a few more windows. Eventually, they may even break into the building, and if it's unoccupied, perhaps become squatters or light fires inside."

A successful strategy for preventing vandalism is to fix the problems while they're still small. Making repairs quickly shows good stewardship. Good stewardship thwarts damage and deterioration.

Stewardship originally referred to the servant's duties to bring food and drink. Stewardship responsibilities eventually expanded to include all of the domestic, service, and management needs of the household. **Stewardship today is the acceptance of responsibility to shepherd and safeguard the property of others.**

A saying attributed to Native-Americans reflects the essence of stewardship: "We do not inherit the earth from our ancestors. We borrow it from our children." This saying reminds us that, **while we possess some things temporarily, we own nothing permanently.** Much of what we possess existed before us. And it will all have to be left behind when we die.

In the United States, with our emphasis on individual property rights, it can be difficult to accept that we are merely stewards of what we may legally own. If you own something, you can do what you want with it, even destroy it. If you're a steward of something, you have a duty to care for it, even if you don't benefit from that care. Stewardship implies more responsibilities and fewer rights than ownership.

In addition to being a steward of money and material things, you are also steward of your mind, your body, and your time. Your stewardship of these greatly affects how much money and material things will eventually come under your stewardship.

Time is your most valuable resource. Unless you're a good steward of your time, you're unlikely to be a good steward of anything else. **The proper stewardship of time is the first ingredient of wealth.**

In addition to wasting the present time, too many people deplete their reserves of time. They reduce the quality and quantity of their future time by not taking proper care of themselves. Proper stewardship of time includes taking time to care for your body and mind. **Your body and mind are the tools you use to convert time into wealth.**

We have all known people who lost what they legally owned through neglect, carelessness, or abuse. Whether you consider it a law of economics, of nature, or of God, **a prerequisite to getting more is taking care of what you already have.** People want to be assured that, if they entrust something to you, it will be in good hands.

Humans have a natural instinct to want to own things. The concept of stewardship goes against that instinct, which is why it can be difficult to adopt. Adopting a stewardship mentality is often the result of a higher calling.

Becoming a parent is one of those higher callings. When you have children of your own, you transition from inheriting from your ancestors to borrowing from your children. You transition from owner to steward. As we enter our twilight years, we also adopt a stewardship mentality. Even if we spent decades acquiring all we could, we come to realize we can't take any of it with us. At that point, we plan our estate so that everything we leave behind will be entrusted to those who have demonstrated good stewardship.

A higher calling may actually be a literal higher calling. All the major religions profess that we are merely stewards of God's gifts. Those who accept that everything is God's, and that they are merely stewards, embrace the role of steward as an honor, not a burden.

A stewardship mindset can be liberating. It frees you from competitive materialism; you stop keeping score. You care for possessions, but they don't possess you. You fear loss less. You see the bigger picture.

Paul Harvey offered many words of wisdom over six decades in broadcasting. One of his bits of advice was "Leave the woodpile higher than you found it."

For thousands of years, wood was our primary source of fuel. For many, it was as essential to survival as food and water. Community woodpiles made sure everyone had enough wood to survive. Citizens were expected to not exploit this public asset and to add to it as were able.

No one owned the woodpile, yet everyone had a responsibility to it. No one wanted to see the woodpile abandoned because there were more takers than givers. Everyone was a steward of the woodpile.

The metaphorical woodpile that benefits everyone was built by your ancestors. Leaving it higher than you found it is your tribute to your ancestors and your responsibility to your children.

FUTURE VALUE

(DIS)CONNECTIONS

In the opening scene of *The Godfather*, Bonasera the undertaker offers Don Corleone money to kill the men who violated his daughter. The Don replies, "What have I done to make you treat me so disrespectfully? You don't ask this favor out of friendship. Instead you come to my house on the day of my daughter's wedding and ask me to do murder for money."

In our world, we have *social norms* and *market norms*. Social norms are an unwritten code of behavior between people. They're about helping each other and getting along. They're the glue that holds a society together. They're biological.

Market norms are transaction-based. They involve a bottom line. They can be precisely measured. They're mechanical. Bonasera's offense to Don Corleone was inserting market norms where social norms belonged.

When social norms collide with market norms, social norms almost always lose. This collision usually occurs when market norms invade the world of social norms. Don Corleone refused to let market norms usurp social norms in his world.

In social relationships, social norms should rule. When you're invited to a friend's house for dinner, you bring a bottle of wine as a gift; you don't offer to "pay the tab" at the end of the evening. When your neighbor asks to borrow your lawn mower, you lend it with the expectation he will return the favor; you don't charge him rent. Reciprocity is part of social norms and market norms. With social norms, reciprocity is expected; with market norms, reciprocity is required.
With a higher calling, social norms should prevail. People are more inclined to donate blood than sell it. If people want to do something for altruistic reasons, you'll offend them and risk losing their support if you bring money into the equation. Blood donors are offered cookies and juice as a thank-you; they're not offered cash as compensation. The good feeling we get from giving is priceless; never attempt to put a price on it.

Adhering to social norms requires courtesy and patience. Many potentially romantic relationships were never consummated because the man commented that he had spent a good bit of money and wasn't receiving anything in return.

It's considered rude to put market norms ahead of social norms. It gives the impression you care more about the money than the person. Many business deals were never consummated because one party began talking business prematurely. For example, in golf there are certain social norms. Never discuss business the first time you play with a customer or client. Never discuss business before the third hole, after the fifteenth, on the green, or when someone is preparing to shoot.

People prefer doing business with people they like. Social norms create an environment for others to get to like you. Adhering to social norms shows you like, or at least respect, the other person enough to be courteous.

If you introduce market norms where social norms belong, market norms will almost always win. But inserting market norms too soon almost always ends up killing the business deal *and* damaging the social relationship.

Money enables us to have more relationships. But those relationships are based on market norms, and they exist only as long as there's a financial component. Social relationships should avoid having a financial component. When a financial component is introduced, it often does serious damage to the relationship. More than one friendship ended when money was borrowed and wasn't repaid. If you let it, money is more likely to disconnect you to others than to connect you.

For many, nothing represents the material world with all its flaws more than money. This belief is formed because they've seen too many cases where money has brought out the worst in people. Money has that ability, but it's not money's fault. Money merely reflects the qualities of those who possess it.

If you want to become less materialistic and more spiritual, one of the best places to begin conversion is through your use of money.

Money incorporates many of the characteristics of the material and the spiritual. You can see it and touch it. Money is precise and measurable. Almost anything in the material world can be attained with a sufficient amount of money. If you had to pick one thing to represent the material world, money would be an excellent choice.

Money also mimics characteristics of the spiritual. Money is only of value to those who believe in its value. After the Confederacy was defeated in the Civil War, Confederate money became worthless because no one believed in its value any longer. **Money, like God, requires a certain element of faith in it.**

Money can bring out the worst in our earthly selves; it can also bring out the best in our spiritual selves. Every time we use money to benefit others, we reveal our spirituality.

Money not only works well in both the earthly and spiritual realms, it can also work between the earthly and

the spiritual. Money can bridge the gap between them and reconcile the two to each other. You can turn greed into generosity by simply turning money from an inward to an outward direction. Making a will is recognition that money is merely an earthly creation. It can also remind you that you are more than merely an earthly creation.

Money was created for a noble purpose. Money is an inspired invention of people who understood the play of forces in human life. It was created as a way of recognizing that humans have property rights, but that no human is self-sufficient.

Money enabled people to establish connections they could never establish without money. The invention of money greatly facilitated trade. Throughout history, trade has increased connections within cultures and between cultures, reducing the risk of war.

Money used rightly connects people. Money used wrongly disconnects people. Money can be either a wedge or a bridge between people. But it's people, not money, who make that call.

MEASURES AND PLEASURES

In 2011, the United Nations General Assembly invited member countries to measure the happiness of their people and use the findings to help guide their public policies. The now-annual *World Happiness Report* is the result of that invitation.

Residents of these countries rank their happiness on a scale of 1-10 in such areas as GDP, social support, health, freedom, generosity, and government. The happiest countries have overall scores above 7; most of them are in northern Europe. The unhappiest countries have overall scores under 4; most of them are in Africa.

Wealth was certainly a factor in peoples' perceptions of happiness. The countries at the top are far wealthier than those at the bottom. But wealth was only one of many factors. Health, freedom, and social support were ranked more important to happiness than money. The U.S. ranked 15th out of 158 countries; only two of the higher-ranked countries had a higher per-capita GDP.

Most people, at least in the U.S., believe more money will make them happier. Studies conducted in many countries over several decades have reached some interesting conclusions. First, it is harder to be happy if you are living in poverty, though many manage to be. Second, once you reach the average income for your society, there is little additional happiness from more money. Third, the sacrifices necessary to raise your income well above the average can lead to unhappiness and regret.

We seek success, happiness, and pleasure. We often fail to acquire them because we confuse the three. Specifically, we get the connection between

success and happiness wrong. We also confuse pleasure and happiness.

Author Dale Carnegie said, "Success is getting what you want; happiness is wanting what you get." Nobel Peace Prize recipient Dr. Albert Schweitzer said, "Success is not the key to happiness; happiness is the key to success." These quotes make two important points: First, happiness is not something you find; it's something you create. Second, happiness makes a better starting point than a destination.

People equate success with happiness; they see happiness as the inevitable result of success. Achieving success can often prove disappointing, though.

For example, a young woman equates success (and happiness) with becoming a partner at her firm. She works long hours and makes sacrifices to make partner. Once promoted, she experiences more emptiness than elation. She has success, but the happiness she expected is missing; happiness was not automatic with success. She might actually feel sadness because her expectations of happiness were so unmet.

The most common measure of success is money. In any given field, the person who is paid more is considered more successful. If we equate success with money, and if we equate success with happiness, it's easy to then equate money with happiness.

Do you know of anyone who is successful, wealthy, and unhappy? Do you know of anyone who is happy, despite no typical or obvious success or wealth? If you do, those people disprove money equating with happiness.

Money is our default measure of success because it is precise and familiar. Success is also easy to measure in most cases because it involves the achievement of measurable goals. Happiness varies greatly by the person; it is far less definable and harder to measure, especially with money.

The happiness that success brings lies not in the achievement or the rewards, but in the effort made to reach the achievement. If you think about your past successes, the journey to success was probably more fulfilling than the destination. Money may have been a byproduct of your success, but if money was your motivation to succeed, you probably felt a letdown from success. The kind of success that leads to happiness doesn't need a financial component. A financial component might actually impede happiness.

It's easier to generate negative emotions than positive ones. We expect to feel sad when we fail, so failure usually generates sadness. Success generating happiness is trickier and less reliable.

Success and failure are two sides of the same coin. They are also nouns, not adjectives. You *realize* success or failure; you *are not* a success or a failure. **The less** you depend on success for happiness, the less failure will burden you with sadness.

Because we incorrectly equate money with happiness, we then think we can buy happiness. We think we can buy happiness because we confuse happiness with pleasure.

Pleasure is a sensual gratification or indulgence. Pleasure is triggered by an external stimulus. People seeking happiness often look for it down the path of pleasure. Sex, drugs, rock 'n roll, a new Mercedes, a house at the beach, and a Mediterranean vacation can all bring pleasure; none of them can bring happiness.

Pleasure is externally generated; happiness is internally generated. Happiness does not depend on

external circumstances or material wealth for its existence and growth.

Money can buy pleasure, but not happiness, in the same way that money can buy books, but not wisdom. **Pleasure involves receiving. Happiness involves giving.** Money can bring pleasure in its accumulation and on the external stimuli it can buy. But it brings happiness through its voluntary sharing with someone or something that benefits others.

It's not only more blessed to give than receive, it also brings greater happiness. In one research study, people were given \$100. The first group was instructed to spend it on themselves; the second group was instructed to spend it on others or to give it away. The second group reported happiness measures resulting from their actions that were *four times higher* than the first group.

Money may buy pleasure, but pleasures often deliver more bad than good. Most pleasures come at a price beyond money. Pleasures also fade quickly, while the money spent on them stays gone forever.

Money can't buy the kind of success that's of value. Money is a poor motivation to succeed. And money as a reward for success leads to disappointment.

Money can't buy happiness, though it can improve conditions to create happiness. If you're successful enough to have a lot of money, your money can remove some impediments to happiness and allow you to indulge in a few pleasures. Beyond that, the best way to attain happiness from money is to create happiness for others.

INPUTS AND OUTCOMES

Charles Van Doren, Marion Jones, Atlanta Teachers, 1919 Chicago White Sox, Volkswagen, Rosie Ruiz, Lance Armstrong, Bernie Madoff, Enron, Ben Johnson, Harvard Students, Ivan Boesky.

The list above is varied, but they have one thing in common. They are some of the more notorious cheaters in history. Whether it's cheating in business, education, or sports, the cheaters listed above have one thing in common with all cheaters – **they tried to change the outcome without changing the inputs.** The outcomes here involve numbers – sports scores, test scores, race results, or dollars on a financial statement. In every case, the cheaters tried to create a result they had not earned.

Almost everyone cheats at some time. Most times it's small, like cheating in a children's game or claiming higher deductions on a tax return. Almost everyone gets cheated at some time, too. When we know someone has cheated us, it taints the relationship. Cheaters rarely consider the consequences of their actions. They're among the worst examples of the ends justifying the means.

People want to believe that inputs and outcomes are connected. We want to believe that greater effort will lead to greater rewards. We know it won't always work out that way; we just want to know the system isn't rigged against it working out that way.

Employers use outcomes to motivate employees to contribute their inputs. One outcome employers want is higher profits. The quality and quantity of employee inputs greatly affects profits. Employees seek two types of rewards – intrinsic and extrinsic. Intrinsic rewards are desired for their own sake, like autonomy and a sense of accomplishment. Extrinsic rewards can be status or money, or simply avoiding punishment. Intrinsic and extrinsic rewards are employees' desired outcomes. They motivate employees to increase input.

High inputs are the result of high motivation. To be highly motivated, you have to believe that higher effort will lead to higher performance and that higher performance will lead to your desired outcome. When these connections exist, you see the connection between inputs and outcomes. You're motivated to do your best, and you're not motivated to cheat.

If you don't see a connection between your effort and your performance, you'll lose motivation and eventually quit. Effort is important, but talent can play a role in outcomes, too. If you're low on talent, it's hard to stay motivated; you may work harder but perform worse than those with more talent.

If you don't see a connection between your performance and outcomes, you'll lose motivation. **If others are cheating, they're stealing the outcomes you worked for.** When the boss takes credit for your ideas or gives the promotion you earned to his nephew, it's easy to doubt the connection between inputs and outcomes. When that happens, there can be a strong temptation to stop trying, or worse, to join the ranks of cheaters.

In your work, the desired outcomes of your employer may not match your desired outcomes. If the two are far apart, you won't be motivated, and your input will be low. In that case, it's in your interest to find a place where you and your employer want the same outcomes. In your personal life, it's easier to maintain the connection between inputs and outcomes. If you eat less and exercise more, you will lose weight. If you enroll in college and study hard, you will earn a degree. If you save money every month, you will be wealthier at the end of the year.

Sometimes we misjudge the connection between inputs and outcomes. The misjudging is almost always a case of underestimating inputs and overestimating outcomes. You won't lose thirty pounds in a month by walking one mile a day, and you won't be a millionaire in ten years by saving \$10 a week. It's natural to seek maximum outcomes from minimum inputs. Reality checks help align behavior and expectations.

When it comes to inputs and outcomes, what stresses people and drives them crazy (or to cheat) is thinking they have control over outcomes they can't control. It's a helpless feeling when you can't control an outcome, yet others hold you responsible for it. It's a frustrating feeling when you can't control an outcome you want. In the first case, you may be tempted to cheat out of fear. In the second case, you may be tempted to cheat out of greed.

Some examples where you might think you control the outcome, but don't:

- Your spouse. Whether you want your spouse to change or not change, prepare to be disappointed.
- Your kids. You may do everything you can to raise them into certain types, but they will be who they are.
- Everyone else you know. The best you can do is to be a good role model and hope some of it rubs off.
- Winning any competition. You can control your play; you can't control others' play. Some days someone else just plays better.

- Your work. Even if you're self-employed, there may be unstoppable outside forces that can destroy a business.
- Your investments. You can set aside the necessary amount and choose appropriate investments, but how they will perform is up to the market, not you.
- Your expiration date. You can live a healthy lifestyle, but fate is never far away.

Knowing you actually control few of your desired outcomes can be frustrating. It can make it easy to give up on the input side. But your inputs still have more of an effect on your desired outcomes than any other factor. There may not be a perfect correlation between inputs and outcomes, but the correlation is still high.

Knowing you control inputs but not outcomes can be liberating. That knowledge reduces the temptation to cheat. Knowing you control inputs but not outcomes frees you to do your best without worrying about being the best.

FUTURE VALUE

THE TWO YOUS

In the movie *The Shawshank Redemption*, Morgan Freeman plays Red, a man who has spent forty years in prison for a murder he committed at age twenty. Red is up for parole for the umpteenth time. Whenever he's been asked at these hearings if he's sorry for his crime, he's told the parole board what he thought they wanted to hear. This time he speaks from the heart:

"Not a day goes by I don't feel regret, and not because I'm in here or because you think I should. I look back on myself the way I was – a stupid kid who did that terrible crime. I wish I could talk sense to him. Tell him how things are. But I can't. That kid's long gone and this old man is all that's left. And I have to live with that."

You're unlikely to do anything that will land you in prison for forty years. But you are likely to do many things you will regret later in life.

There are two yous – present-you and future-you. Just like Red, future-you will pay the penalty for what present-you does or doesn't do.

Another actor, John Barrymore, said, "A man is not old until regrets take the place of dreams." By that definition, one can be old without having lived a long time. The more things you do that create regret and crush dreams, the faster you become old.

You've probably heard the old saying – "Eat, drink, and be merry, for tomorrow we die." The saying is based on verses from the books of Ecclesiastes and Isaiah. Many people live by this motto. If you're actually going to die tomorrow, this is excellent advice. If you're not, tomorrow you'll just be fatter, hungover, and depressed. If you're wondering if you're the type of person whose future-you will be punished by present-you, there are ways of telling. If you binge eat or drink, present-you is getting the pleasure while future-you is getting the pain. If you buy things on impulse even though you don't have the money, present-you is sticking future-you with the bill. If you ignore saving for retirement because you'd rather have a good time now, present-you is stealing from future-you. **If you know an action has long-term consequences and you do it anyway, you're guilty of elder abuse in the future.**

If you've already experienced the consequences of a past action, you can't claim ignorance if you do it again. Many of your actions have long-term consequences you haven't yet experienced. In those cases, you may be more guilty of ignorance than of future-you abuse.

This ignorance is partly due to a lack of imagination. It's hard to imagine being older. A single twenty-fiveyear-old struggles to imagine being forty-five, married with kids, a mortgage, and a boring job. To imagine being seventy-five, sick, broke, alone, and living in public housing is asking a lot. But it's necessary because not being able to imagine it makes it more likely to happen. If you ignore future-you, a poor, unhealthy, unhappy future-you is your default scenario.

Taking care of future-you requires present-you to make some sacrifices; there's no avoiding it. It may mean staying home and studying instead of going out with friends. It may mean not taking a trip to fund your 401(k) plan at work. It may mean getting serious about losing weight. All of these ask present-you to give up something now to benefit future-you. Sacrifices made in the present pay future dividends. Sacrifices not made in the present exact future penalties. Health and wealth are two important areas of focus. Poor health habits in the present don't just create future health issues. The cost of trying to restore health in the future can destroy wealth.

Examples of poor health choices are all around you. People who smoked, drank, didn't exercise etc. pay the price in old age, assuming they get there. Their care also exacts a price from the rest of us.

Poor financial choices may not be as obvious as poor health choices, but they can be more devastating. If you think money is important when you're young, it's nothing compared to when you're old. When you're old, you can do fewer things for yourself, including making money. A lack of money in old age makes everything harder when you're least able to handle it.

You may not be able to create a conversation between future-you and present-you, but it's worth trying. Ask future-you what present-you is doing that will penalize future-you. You may already know many of the answers.

If you can't manage that conversation, ask some older people what they would want to tell their younger selves. What advice would they give? What would they say was most important to do, or not do? What past actions had the biggest rewards and the biggest consequences? Use their experiences to guide you.



Future-you will be your own creation. Work to create a future-you who can live in dignity, someone who is worthy of respect. And a future-you worthy of respect begins with respect from present-you.

THE MONEY FOLLOWS THE MISSION

If you've ever researched a company or interviewed for a job, you've certainly come across a mission statement or two. Most of them come across as a car wreck of corporate-speak. They could apply to almost any organization. There's even a web site called *Mission Statement Generator*. It offers a menu of pre-packaged mission statements, as well as lists of adjectives, adverbs, verbs, and nouns to "customize" your mission statement. Here's just one example of their product:

Our vision is to continue to collaboratively synergize market-driven intellectual capital while continuing to synergistically administrate enterprise-wide leadership skills to meet customers' needs.

You're probably also familiar with TED Talks. TED began in 1984 as a conference converging Technology, Entertainment, and Design (hence, TED). Today, TED Talks cover a wide variety of topics in more than 100 languages. TED's mission statement is: *Spread Ideas*.

In two words you know what TED is all about. You also know it's an organization you can probably support. That's the mission of the mission statement.

Do you have a mission statement? Do you even have a mission? You'll want both. Your mission will be the sail that pulls you through life in general and through rough waters in particular. Your mission statement will be how you convey your mission to others so they will enthusiastically offer their support.

A good mission statement:

- Uses understandable language
- Is emotionally stirring
- Communicates "Why", not just "What" or "How"

- Is a single, concise, powerful sentence
- Sounds good when spoken
- Is memorable, actionable, and specific.

You will likely have several personal missions throughout your life. Most of these may require moral, rather than financial support from others. You will also have professional missions. Those will require financial support.

People don't give to need; they give to vision. Giving to need can become endless. People are willing to give based on temporary need. But if need is seen as endless, or if there's no plan to overcome need, they won't continue giving.

Even your strongest supporters won't support you indefinitely just because you have a need. They need to know their support is leading to something better. Your mission is the something better, and your mission statement tells them about it. It assures people their financial support is not the end, but the means to an end.

One of your first professional missions is to get the necessary education to enable you to fulfill future professional missions. To that end, you pursue degrees, get technical training, and serve internships. Most people need the support of others to fulfill even this first mission.

If you're seeking financial support, the "Why" is more important than the "What". For example, you may need money for tuition, but you would tell supporters about your plans to use your degree to become more self-sufficient and make the world a better place through your chosen profession. If you were seeking seed money for a new business, you wouldn't talk about the need to rent space or buy equipment. You would talk about how the products or services you will produce will have a positive impact on people's lives. If people believe in your mission, in your "Why", they will give more freely. They will also leave the details, the "What, How, When, and Where", up to you.

One professional mission that isn't verbalized (but is always there) is the mission to make money. It isn't verbalized because **money should not be the cause of a mission**, **but rather the effect of a mission accomplished**.

Few people take the time and make the effort to develop a personal or professional mission statement. They don't do it because few people have a personal or professional mission to make a statement about. Taking the time and making this effort has several benefits. It helps you to **clarify** what is most important to you and it helps you to **concentrate** your efforts on what's important. It also makes it easier to gain support – moral as well as financial - for your mission.

There's a lot of competition out there for limited funds. Many people competing for financial support aren't good communicators. They may have noble missions, but if they can't articulate those missions to the people with money, they won't get any. If you have a mission people can support and you can articulate it with an effective mission statement, you will be way ahead of the competition. And the money will follow your mission.

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GOAL-TENDING

"If your only goal is to become rich, you will never achieve it."

-John D. Rockefeller Sr.

John D. Rockefeller knew something about becoming rich. He was the founder of Standard Oil Company, which, at its peak, controlled 90% of all oil in the U.S. Adjusted for inflation, his fortune upon his death in 1937 stood at \$336 *billion*, more than the five richest people in the world today combined.

Rockefeller's statement is true for a couple of reasons. First, **becoming rich in any endeavor is, or should be, a by-product, not a goal.** Riches, honestly made, come from providing something of value to others. If customers will buy enough of and pay enough for what you provide, you can become rich.

Second, how do you define rich? It's a sliding scale. **We frequently think of being rich in relative terms.** Even poor Americans are considered rich by the standards of many countries. We compare our wealth to others to determine if we're rich. As we become richer, we keep changing our reference group. If we hang out with richer and richer people, we feel less and less rich.

While we frequently judge our wealth compared to others, we also judge our wealth by what we don't yet have. If your net worth were ten-thousand dollars, you would classify rich as having half-a-million. Once you got there, the bar would move to one million; then five; then ten; then fifty. You might never consider yourself rich because your definition of rich would keep changing. People frequently realize how rich they were only after they lose their fortune.

The purpose of this lesson is not to discourage you from becoming rich. The purpose is to encourage you to set goals you can achieve to become rich if you want to.

If your mission is your sail, your goals are your rudder. Goals, like a rudder, keep you going in the right direction.

In recent years, American business has embraced the concept of **SMART** goals. The acronym stands for **S**pecific, **M**easurable, **A**chievable, **R**ealistic, and **T**imetargeted. The concept of SMART goals contends that specific, challenging goals increase performance more than goals that are not.

SMART goals affect outcomes in four ways:

- They focus attention to goal-relevant activities.
- They increase effort if a goal exceeds current levels.
- Pursuing a goal increases persistence through setbacks.
- They can change long-term behavior for the better.

Imagine you're a runner on your school's track team. Your specialty is the one-mile run. If your coach set a goal to "run faster", how would you respond? Is one second faster sufficient? Are ten seconds insufficient? You need more guidance.

Instead of telling you to run faster, your coach makes this your goal: run one-mile in competition in less than 5 minutes before the end of the season in two months. You now know exactly what you have to do. This goal is *specific* (one-mile run), *measurable* (less than five minutes), and *time-targeted* (by the end of the season).

What's still unknown is if this goal is *achievable* and *realistic*. A good coach would set goals that were both, but that were also a challenge. **Goals that are too easy**

don't enable you to reach your potential. Goals that are too hard may discourage you from even trying.

While coaches and others may set goals for you, you have to embrace a goal if you're going to reach it. Parents often set goals for a child that the child doesn't embrace. The parents are then disappointed when the child doesn't achieve those goals. Once you embrace a general goal (being the best runner you can be), others can help you with the specifics. Other people, like parents and coaches, may actually be the better judges of your potential.

Some people think that setting small goals leads to less success because you aren't pushing yourself. That's not the case. Small goals that get accomplished spur us on. Large goals always seem to be over the horizon. The positive reinforcement from achieving small goals enables continued progress toward larger goals.

If you were a recent college graduate and were told you will need \$4 million in order to retire comfortably at age 67, that goal might seem so impossible you would never even try. On the other hand, if you were told that investing 12% of your income in the S&P 500 every paycheck between now and 67 would get you to \$4 million, that would seem quite doable. It was a matter of taking one enormous goal and breaking it down into about 2,000 little ones.

Goals should lift you up, but not hold you back. Goals that are set too low can hold you back. In saving for retirement, you might find you can easily save 15% of your income. If so, you need to raise your goal. **Goals should have enough flexibility that you can raise them to keep you challenged and lower them if they're impossibly high.** The path to achieving your goals will not be a straight line. We typically start out with great enthusiasm, excited by this new challenge. We also end with great enthusiasm, knowing victory is at hand. It's the long slog in the middle that can undo everything. Realize there will be setbacks along the way. Realize your enthusiasm will wane when you're a long way from the beginning and the end. Realizing these conditions will enable you to face them head on and overcome them. **To achieve most of your goals, the only tool you really need is persistence.**

Goals involving money are easy to make because of money's characteristics. Money is very *specific* and *measurable*. Money can be very *time-targeted* because savings and growth rates can be precisely calculated.

Goals involving money also need to be *achievable* and *realistic*, which are judgment calls. Whatever your money goal, you can accurately calculate what needs to be done to achieve it. The only question that remains is - are you willing to do what needs to be done?



WEALTH'S NOT-SO-MAGIC FORMULA

If you're looking for some quick and easy ways to get rich, *Bloomberg Business* has offered these possibilities:

- Be born rich.
- Inherit a fortune.
- Marry rich.
- Divorce a rich person.
- Have an affair with a bigwig.
- Win the lottery.
- Discover oil on your property.
- Unearth gold with a metal detector.
- Find treasure in your basement.
- Get lucky at a yard sale.
- Catch a record-breaking home run ball.
- Your bank adds extra zeroes to your account.

Most of these are possible; none are remotely probable. If there were a high-probability method of quick and easy (and legal) riches, it would be the world's worstkept secret.

If you want to get rich quickly and easily, the best way may be selling people ways to get rich quickly and easily. There will never be a shortage of people looking for shortcuts to wealth. The quicker and easier the method, the more people will be attracted to it. But any method you may devise will almost certainly be deemed a fraud by the courts, so proceed cautiously.

There are two essential ingredients to creating wealth. Any wealth formula that doesn't include these two ingredients is a transfer of wealth, or worse, a theft of wealth. These two essential ingredients are *Work* and *Delayed Gratification*. Any claim that wealth can be created without these two ingredients is a lie. Most people are willing to do the work. Most people aren't willing to do the delayed gratification. Delaying gratification requires discipline and a longterm perspective, two traits in short supply.

Delaying gratification is difficult under the best of circumstances. There are many demands and temptations in the present to spend money. Delaying gratification cuts against the grain of our consumer culture. Ours is also not a patient culture. We are always looking for faster ways to do something, especially getting rich.

Work creates money, but delayed gratification turns it into wealth. Delayed gratification requires selfcontrol. Delayed gratification is also more than a wealthbuilding skill; it's a survival skill.

Even if your goal isn't wealth, delayed gratification is essential when you're young to avoid poverty when you're old. Unless you pull off one of the quick and easy ways to get rich listed earlier, **the money you will spend** when you don't work is the money you didn't spend when you did work.

Delayed gratification protects something of value from being consumed in the present. It provides the opportunity to grow it into something more substantial in the future.

Here is the not-so-magic formula for creating wealth: Work/Earn/Invest/Repeat. That's it. It's not complicated, merely hard, which is why so few people are wealthy.

WORK. You will almost certainly never become rich by your labor alone. But **your labors, mental or physical, are the seeds of wealth.** In the 21st century, mental labor dominates. Even if you work with your hands, you have to work with your head, too. Your hands can also be replaced easier than your head. **EARN**. If you're going to work, you want to earn all you're worth. That does not mean you settle for the highest-paying job. You want to earn a higher income and earn it for a long time. **Your best chance to earn more and for longer is to work at something you both enjoy and are good at.** The less your work feels like work, the better you will do it, the longer you will want to do it, and the more people will pay you to do it.

INVEST. This is where delayed gratification comes in. One definition of *invest* is to spend or utilize for future advantage or benefit. **Investing requires giving up something good now for something better later**; that's pretty much the definition and purpose of delayed gratification.

Investing is a broad term here. It can be money in stocks; it can also be money in your own business or money in self-improvement, like further education. It's also the investment of time. Investing time for a better future usually requires sacrificing some pleasures in the present.

REPEAT. A process is an ongoing series of actions. Building wealth is a process. **Maintaining the process of building wealth will be easier if you make a habit of it.** Getting started is the biggest challenge in creating a habit. Make the effort to start the process and develop it into a habit. It won't take long before work-earn-invest becomes a habit you don't even have to think about.

For centuries, people have sought a magic formula for wealth. Those people were often lazy or impatient or both. There is no magic formula, but there is a formula. It's amazingly simple, incredibly effective, and anyone can do it. Anyone can do it, but few will. Will you?

FROM NOT-RICH TO RICH

The rich are probably the most reviled *and* the most envied people on earth. Oddly, many of those who most revile the rich would quickly join their ranks if given the chance. False and negative stereotypes of the rich don't help. The not-rich also believe they would never become the stereotypical rich person if they became rich.

In truth, the rich are different from the stereotypes. They're also different from the not-rich, but not in ways you might not think. If you want to go from not-rich to rich, you'll want to know how the rich are different.

The rich prefer opportunity over security. Opportunities almost always involve risks, but the rich know that risk and reward move in tandem. The rich are comfortable being uncomfortable. The rich rarely work for someone else. At some point, they made the decision that the security of a paycheck was not worth losing the opportunity for an unlimited income. The rich will give up a floor of security to remove a ceiling on opportunity.

The rich live below their means – always. Even before they became rich, the soon-to-be-rich saved and invested a large percentage of their incomes. That habit didn't change when they eventually became rich; it merely got easier. Even after they become rich, the rich continue to live below their means as a tribute of sorts. They know that living below their means was the single biggest reason they became rich, so they appreciate its power and continue its practice.

The rich don't climb the ladder; they own it. Even if you're well on your way to the top in the corporate world, you're still working for someone else. The CEOs of the biggest corporations still have bosses – the board

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of directors. The board of directors is made up of the biggest stockholders of the corporation. They don't need to work for money because their money works for them. If you work for someone else, you let others tell you what you will do and how much you will be paid for it. The rich refuse to accept such restrictions.

The rich choose their friends carefully. People gravitate to the level of their associates. Most people have an income equal to the average of their three closest friends. The rich learned early on to gravitate upward. They began associating with people they admired – not because of their wealth, but because of their work ethic and their record of success that led to their wealth. The soon-to-be-rich learned what it really took to be successful, and they put it to use in their own lives.

The rich know that work is more about learning than earning. The not-rich can be persuaded to change jobs for a small pay raise. Those job changes are often lateral moves that don't provide the opportunity to learn new skills. Especially in the early years of their careers, the rich looked for opportunities to learn the most, not earn the most. They then parlayed that knowledge into the career or business that helped make them rich. The rich also recognize that learning never ends because you can never know all you need to know.

The rich prefer having money more than the things money can buy. Few things that can be bought with money appreciate in value. Most things we buy depreciate quickly. Money that's invested can grow. Money that's readily available can be tapped when an opportunity to buy something that will appreciate in value comes along. The rich value the opportunity *and* security that ready money affords them.

The rich focus on their earning power first. Saving is good. Investing is good. Living below your means is good. The rich realize the more you earn, the more you can save and invest and the easier it is to live below your means. They devote huge amounts of time and energy figuring out how to maximize their earning power.

The rich are less emotional about money. That statement may not seem logical, but logical is what the rich are when it comes to money. When the stock market is booming and prices are high and everyone is frantically buying, who's doing the selling? The rich. When the stock market tanks and everyone is frantically selling, who's doing the buying? The rich again. The rich make money off the not-rich because the not-rich are emotional about money while the rich are logical. The rich are logical about money; they're passionate about it too, and that's a potent combination.

The rich set audacious goals. One young man set a goal of building a company that would be worth \$100 million in twenty years. Another young man set a goal of earning \$100,000 in ten years. One goal was audacious; the other was realistic. The second young man would probably reach his goal. The first young man might fail miserably at his goal. His company might only be worth \$20 million after twenty years. Even so, he would have grown his wealth by a million dollars a year over that time. Not bad for a failure. The risk is not in setting goals that are too high; it's in setting goals that aren't high enough.

The rich know that work alone will not make you rich. Unless you're a famous athlete or entertainer, income from your work is limited. The rich know two more things. The first thing is that their money can earn more than they can. Money never sleeps, and it's always out there making more money. One way to know you're rich is you can't earn as much money in a year as your money can.

The second thing the rich know is that it's better to make a small amount from a lot of people than to try to make a lot from you alone. One reason most rich people are business owners is they make something from each person who works for them. If you own a business that employs 1,000 people and you make \$1,000 a year from each employee's labor, you've made a million dollars that year.

The rich live in the future. They have ideas. They have vision. Their biggest pleasure in the present is working to make the future better for themselves and others. The rich like living in the future because they're optimistic about the future. They're optimistic about the future because they plan to have a positive impact on it. Even if they have it good now, the rich believe the best is yet to come.

The rich believe in themselves. Success begets success, but success needs a starting point. At some point in the early years, the rich made a bet on themselves and they worked to make the bet pay off. That first success led to future successes. The rich know the odds are with them when they try something new. Even if they fail, they will learn from the experience and be more likely to succeed in their next venture.

The rich believe in more than themselves. Most of the rich marry only once. Most of the rich practice a faith. Most of the rich have strong ties with family and friends. Most of the rich know that, while being rich is better than being poor, it doesn't make them better people. And the rich also know, even more than the notrich, that the best things in life can't be bought.

GOING THE DISTANCE

Throughout most of history, humans practiced *persistence hunting* - a group of hunters would literally run their prey to death. Our survival as a species depended on our ability to pursue prey, even fast prey, until it collapsed. It was the most efficient form of hunting until firearms appeared.

Persistence hunters never knew if they were going to run 10, 20, or 50 miles on a hunt. The hunt ended when the prey collapsed. The human body evolved incredible endurance to undertake such hunts.

This evolution is still with us. Almost no animal can run for as long or as far as humans. A world-class marathon runner can run over 26 miles at an average speed of over 12 miles per hour. We not only run long distances, we can run for decades. Marathon runners in their sixties are often faster than they were in their teens.

Aesop's fable of the tortoise and the hare offers many timeless lessons. Persistence is better than speed. Slow and steady wins the race. Talent without discipline is useless. Run your own race.

Imagine you're training for a marathon. You find a 10-minute-mile pace will enable you to finish the 26.2 mile race. What would happen if you ran the first third of the race at an 8-minute-mile pace? Around the 9-mile mark you'd be nearly 20 minutes ahead of your target. You'd be feeling pretty good at that point.

That fast pace would start taking its toll soon after. About halfway through the race, your per-mile pace would be slower than your 10-minute target. Before you finished 20 miles, you would "hit the wall". At that point, your system would be depleted and you couldn't take another step. You sacrificed endurance for speed. It cost you any chance of accomplishing your goal, of reaching the finish line.

Meeting your financial goals, especially building wealth, requires endurance, persistence, and discipline. Meeting your financial goals doesn't require speed because it's not a sprint; it's a marathon.

Meeting your financial goals is a marathon, but your only competition is the clock (actually, the calendar). **Your financial goals have nothing to do with anyone else's financial goals or performance.** A major reason people fail to meet their goals is they get competitive. They also let others set the pace.

If your financial goals are a marathon, your goal for the marathon is not to win. Winning isn't a goal because you're not in competition with anyone else. **Your goal is to finish the marathon.** Finishing is accomplishment enough. You won't finish this marathon if you start sprinting in the middle trying to catch someone else.

Humans require endurance far more than speed. Our lives are long. We pay few penalties for lack of speed. We pay major penalties for lack of endurance. Doing well financially in your twenties won't mean much in your sixties if you don't maintain the effort through your thirties, forties, and fifties. The hare took an early lead, but then slacked off. The tortoise maintained a consistent pace.

The value of endurance over speed shows up early in school. There are no prizes for being the first one to complete a test. Earning a high school diploma is a thirteen-year marathon itself. Those who don't complete it face severe financial penalties later. Employers say a major reason they recruit college graduates is their degree demonstrates they have endurance, persistence, and the ability to finish what they started.

The creation of wealth takes time. Overnight wealth is almost always the result of a transfer of wealth, not the creation of wealth. Sometimes the wealth was transferred legally, such as by inheritance. Sometimes it's transferred illegally, such as by fraud.

The desire for quick riches leads to shortcuts. A business may overcharge customers or produce inferior merchandise. A taxpayer may cheat on his taxes. An investor may borrow heavily to play the market. There is no shortage of shortcuts.

Shortcuts can't be sustained for very long. Customers leave. The IRS runs an audit. The stock market takes all your money, including the money you borrowed.

Shortcuts don't lead to your goal. You end up having to backtrack to the regular path. Shortcuts don't save time or make money – they exact a penalty of both.

If your goal were to retire at 50, you'd have to make a choice – make extraordinary sacrifices or take shortcuts. Sacrifice is hard and shortcuts don't work. If neither were true, then everyone would be retired at 50.

Investments that tout speed over endurance end up giving neither. A legitimate long-term investment might double your money in eight or nine years. An investment claiming it can double your money in two years is either a fraud or so risky it will likely to be worthless by then.

Two of the biggest financial goals people have are a worry-free retirement and something to leave for children and grandchildren. You will likely have similar goals. These goals get met late in life, but they require effort throughout life. See these goals as a marathon and not a sprint if you hope to reach them.

CHECKBOOK EXPOSE'

If you were developing a serious relationship, would a Checkbook Expose' help you, or hurt you?

If you were running for elected office, would a Checkbook Expose' gain votes, or lose votes for you?

If you were in the job market, would a Checkbook Expose' get you hired, or fired?

Checkbook Expose' is an expression for publicizing your spending habits and money management skills. Even if you never write a check, you have bank and credit card statements that tell your money story. For many, it's a story they would not want told.

A Chief Financial Officer (CFO) is the person responsible for a company's finances. As controller, the CFO presents accurate information about the *past* to stockholders. As treasurer, the CFO is responsible for the corporation's *present* financial condition and use of funds. As a strategist, the CFO is responsible for identifying the best uses of resources in the *future*.

You are the CFO of You, Inc.

As CFO, you are responsible for your financial past, present, and future. You can't change your financial past, but any past problems must be fixed in the present. What you do in the present determines your financial future. Also, negative actions have an impact faster than positive actions.

Money is valued by everyone, and almost everyone feels they don't have enough. Because of money's importance and scarcity, how people use their money says more about their priorities than anything else. A Checkbook Expose' lets everyone know what's most important to you – more than anything you might say. What would a Checkbook Expose' reveal about you? The first thing it might reveal is your ability to live within your means. Are you frequently overdrawn in your bank accounts? That could indicate poor recordkeeping at a minimum; it could also indicate spending that's out of control. The severe bank charges for being overdrawn only compound the problem.

You may not be overdrawing your bank account, but does your credit card balance continue to rise each month? If so, it's a signal that expenses are exceeding income. As the outstanding balance rises, more money each month goes to paying interest instead of principal, worsening the problem.

One of the most important responsibilities of a CFO is cash flow management. Cash flow is the life blood of a corporation. A corporation or an individual that has more cash going out than coming in will bleed to death before long. Every CFO knows **positive cash flow leads to wealth; negative cash flow leads to bankruptcy.**

Beyond the basic money management of cash flow, a Checkbook Expose' can reveal important details about you. What do you spend your money on every month? Do you spend a lot on entertainment, but have a car that is unreliable? Does spending on cigarettes and alcohol leave less money for healthy food? Do you take nice vacations, but don't have needed insurance? Every good CFO knows how to prioritize. **The first priority is business always comes before pleasure.**

Your Checkbook Expose' reveals your spending priorities; **it also reveals your values.** Did more of your money go to vices than to charity? Did you spend money on others, or just on yourself? Did you support causes you believe in with your money as well as your mouth? CFOs know profit is important, but so are other things. In a corporation, the CFO often has to be the voice of dispassionate reason. The CEO and board of directors may get excited about a merger or acquisition. Their excitement can blind them to potential pitfalls. They may not look closely into the financials of their potential partner. The CFO must perform due diligence to make sure the board clearly sees what they're getting into.

The CFO also makes sure business associates are financially solid and well-respected. The corporation does not want its credit or reputation damaged by poorly managed suppliers, customers, or other associates.

You have the same responsibilities as CFO of You, Inc. Your merger may involve wedding vows. A marriage should be a merger of equals; it should not be an acquisition. It should not be a financially responsible person acquiring the financial baggage of a financially irresponsible person. If you're a financially responsible CFO, you have a duty to perform due diligence before merging with anyone.

If you're not a financially responsible person, you'll have problems with any merger. Merge with a financially responsible person, and you'll have to make major improvements or risk ruining the marriage. Merge with an equally irresponsible person, and you'll likely drag each other down further.

You also have a responsibility as CFO to associate only with financially responsible people. You may not have legal liability for financially irresponsible friends, but they can still create a mess for you.

Would your Checkbook Expose' inspire confidence from others? Would others want to associate with you? Would the trends be positive?

Or would a Checkbook Expose' reveal you're not qualified to be your own CFO?

RISK AND REWARD

Go back in time more than 70,000 years. You're a homo sapien living in the Great Rift Valley of east Africa, about the only place on earth your species currently occupies. Persistent drought is making it harder to survive there. One day your leader indicates it's time to look for another place to live. So you start walking.

You walk just a few miles a day. Sometimes you encounter another species, Neanderthals. They're not glad to see you. You encounter new plants and animals. Every day brings new and unexpected risks.

You will only live to be thirty, but over the next 3,000 generations your descendants will travel to every continent, becoming the planet's dominant species.

Humans became the dominant species because we were risk-takers. It's in your genes. It's in your nerves, too. Specifically, your nerve cells emit dopamine, a chemical we really like. It's dopamine that gives us a sense of satisfaction when we accomplish a task. And the riskier the task, the bigger the dopamine hit.

For some people, the rush of dopamine is enough to engage in risky behavior. For the more practical of us, we need more tangible rewards, too.

People spend a good part of their lives evaluating risk and reward. **Nearly every action a person takes with benefits or consequences begins by evaluating the risk-reward tradeoff.** These evaluations can determine the course of our lives more than anything else we do, so it's important to do them right.

Of course, there are some people who choose to ignore risk and see only rewards. And there are those

who seek risk for its own sake. They tend to get thinned from the herd early.

When we think of rewards, we think first of financial gain. **Rewards can also include the absence of financial loss.** In fact, when faced with the prospect of financial loss, people engage in riskier behavior than they do for a similar financial gain.

If you were given \$100, and then offered a double-ornothing coin flip, you would likely turn it down and keep the \$100. But if you had to give up \$100, and then were offered a coin flip to get your \$100 back or pay another \$100, you likely accept that risk. **If it will feel like punishment, we'll take greater risks to avoid it.**

Everyone evaluates risk and reward differently. Your personality plays a big part in how you evaluate them. In general, an optimist is likely to underestimate risk and overestimate reward. A pessimist is likely to do the opposite.

Previous experiences also affect our evaluations. A good experience (maybe just good luck) can lead to underestimating risk. A bad experience (maybe just bad luck) can lead to overestimating risk.

It's easy to look at a situation and see only the rewards but not the risks. You may read about a successful, famous, rich entrepreneur. You want those rewards, so you plan to quit your job and follow in that person's footsteps. But you didn't read the fine print. Your successful entrepreneur may have had several previous failures, including bankruptcy. There were years of struggles and many times when the new enterprise was on life support. You also forgot that for every successful entrepreneur like this one, there were dozens or hundreds who went down in flames.
It's important to honestly evaluate both risk and reward. It's also important to know which one is doing the driving. Risk tolerance is the horse. The reward is the cart. The size of the cart you can pull is determined by the size of the horse. In other words, **the reward you get is determined by your risk tolerance, not the other way around.** You can't expect a small horse to pull a big cart. You can't ratchet up your risk tolerance simply because you want a bigger reward, either.

Our risk tolerance can be hard to gauge. When the risk isn't obvious, we don't give it much thought and can overestimate our risk tolerance. But when the risk is staring us in the face, we find out just how brave we are. In a bull market, many investors are fearless. Then a bear market comes, and their investments drop by 25%. Many of those fearless investors flee the market like they were being chased by an actual bear.

More reward always requires taking on more risk. Free markets make sure that correlation always exists. There is a price to be paid for more reward – that price is more risk. The markets give nothing away.

If you've ever been offered an investment promising high returns with no-risk, it's a scam. It is simply impossible in a free market system to get something for nothing honestly, which is what is being promised with high returns and no risk. While scammers promise high reward-no risk, in reality it's no reward-high risk.

While more reward requires more risk, more risk does not automatically mean more reward. Activities like bungee jumping and Russian Roulette are high risk, but the only possible reward is the rush from not dying.

A low risk tolerance is often the product of fear. Fear is most often the product of ignorance. Knowledge reduces fear. The best way to increase your risk tolerance is to better understand the actual risks.

Many people don't invest in stocks because they see them as too risky. They watch the markets go up and down or they hear stories of people who lost money in stocks and they conclude the risk is too high for the reward.

Stocks can be risky in the short-term. No one knows what the markets will do from one week or month to the next. Short term market swings often have little to do with what's going on in the world. However, over longer periods of time, the markets become much more predictable and far less risky. And stocks are supposed to be long-term investments, not short-term gambles.

Market volatility is not the same as risk of loss. Knowing the difference can raise risk tolerance and the rewards that can follow. The bigger risks for many investors are "safe" investments that will never grow enough to meet their owners' needs later in life.

Whether it's investments, careers, or relationships, we all try to balance risk and reward. The better you can look objectively at both, the better your chances of getting the balance right for you.



LOANERS AND OWNERS

George Lucas of *Star Wars* fame is a very rich man. How he got to be so rich is a lesson for us all.

In 1973, Lucas directed *American Graffiti*. It was a big hit, and Lucas was paid \$150,000 for directing. He was entitled to a salary of \$500,000 to direct his next movie, *Star Wars*. 20th Century Fox Studios had doubts about the movie's commercial potential. Lucas had no such doubts. Lucas went to the studio with a proposition. He would keep his salary at \$150,000, but he would retain all the merchandising rights and the rights to any sequels. Since the studio saw little potential in either merchandising or sequels for this movie, they quickly accepted the offer.

Through 2015, the sequels and merchandising rights Lucas bought for \$350,000 in reduced salary have generated over \$30 billion in revenue. Lucas' personal net worth is conservatively estimated at over \$8 billion, almost all of it *Star Wars* money. By *owning* his movies instead of merely *loaning* his talent to them, Lucas turned each dollar he gave up on the front end into more than twenty-thousand dollars.

Investing can be broken down into two broad categories – loaning and owning. There are pros and cons to each. Whether it's better to be a loaner or an owner depends on the investment itself, your goals for the investment, as well as your own personality and personal goals.

Loaners typically invest in bonds. Bonds are used by corporations and governments to borrow money. When you purchase a bond, you loan money to the issuer of the bond. Bonds are issued with a face value, the amount typically paid for the bond. The bond also has a stated interest rate it pays and a time until the bond matures.

As an example, you purchase a \$1,000 10-year bond from ABC Corp. that pays 6% annual interest. You pay \$1,000 for the bond. Each year for the next ten years, ABC Corp. will pay you \$60 interest (6% of \$1,000). At the end of ten years, ABC Corp. repays you the original \$1,000.

The pros of being a bondholder are you stand near the front of the line to get paid. The issuer has to pay all their bondholders before they can give any money to the owners. You also know how much you will get each year and when you'll get it. If you need steady income from investments, bonds can help provide that income.

The cons are you will never get more than is stated on the bond. Your \$1,000 6% bond will pay you \$60 per year and never a penny more. When the bond matures after ten years, you will get your \$1,000 back and not a penny more. If interest rates rise and you have to sell your bond before the ten years are up, the market price for the bond will be less than \$1,000. Also, if the issuer of the bond goes out of business, you might lose all your money.

Owners typically invest in stocks. When you own stock in a corporation, you own a piece of that corporation. Your shares of stock entitle you to vote for the board of directors for the corporation.

The pros of being a stockholder are you get all the profits after the obligations to everyone else have been paid. Some of the profits may be paid directly to you as dividends. Some of the profits will be retained by the corporation for future growth. That growth will help raise the value of your stock. The rise in the stock's value isn't taxable until you sell it, either.

The cons are you stand at the end of the line to get paid. If there are no profits, you get nothing. If the company is losing money and falls behind on payments to bondholders and others, you won't get anything until all those debts are caught up. The value of your stock can go up and down a lot – usually a lot more than bonds do. Sometimes those price swings have nothing to do with the corporation but are caused by swings in the stock market itself. Finally, all your money is at risk. If the company declares bankruptcy, your stock can become worthless. Even if it doesn't declare bankruptcy, if the corporation isn't likely to make a profit, the market may determine the stock is worthless. A stock's price is determined mostly by that corporation's expected future profits.

As an investment, a corporation is either good enough or it isn't, whether we're talking loaning or owning. If the corporation is good enough to loan to, they should be good enough to own, too. If you don't think they're good enough to own, you shouldn't loan to them, either.

Whether you're a loaner or an owner will depend on your needs and goals. If you need current income, bonds usually pay more in income, though they also don't grow like stocks can. If your goal is long-term growth, stocks have a better chance of providing that. Most investors own some combination of stocks and bonds because they need some combination of growth, income, and diversification.

Finally, your personality can determine whether you should be a loaner or an owner, or at least how much of each you should be. Stocks typically have more risks

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than bonds. Because of that higher risk, stocks typically have higher rewards, too. You may like the thought of higher rewards, but if your personality doesn't handle risk well, you may panic and sell your stocks at the worst time. Even if you hang on, you may make yourself sick worrying about your investments.

Being a loaner offers greater security than being an owner. Being an owner offers greater opportunity than being a loaner. Everyone would like ample helpings of security *and* opportunity, but one comes at the expense of the other. Whether you're a loaner or an owner, and in what proportion, will be determined by your needs, goals, and what you can live with.

MARKET MOVERS

Various studies over the years have shown that economists' predictions are wrong more than half the time. Their failure rate makes them less useful for forecasting than a coin toss, yet they still make forecasts. How can so many experts be wrong so often?

Economists are rational thinkers. What they don't take into account when they make predictions is how irrational humans can be. Our irrationality makes predicting what we'll do a coin toss at best.

It's been said that in the short-term, the stock market is a voting mechanism; in the long-term, it's a weighing mechanism. This description reflects the human aspect of markets. In the short-term, people vote their money in or out of various markets. Which way they vote is often based on their emotions of the moment. In the long-term, the markets measure the actual value of investments. This discrepancy makes markets unpredictable in the short-term, but quite reliable in the long-term.

Whether the product being sold is stocks, bonds, oil, or real estate, **price is affected greatly in the shortterm by supply and demand.** When the economy is strong and stocks are up (the weighing part), demand for stocks also rises, pushing prices even higher (the voting part). When the economy is weak and stocks are down (the weighing part), people move from stocks to the relative safety of bonds. They push stock prices even lower and raise bond prices (the voting part).

In the long-term, the supply and demand for stocks and bonds balances at particular price levels. When demand is higher, the price level will be higher until supply catches up. When demand drops, supply shrinks until price levels rebound. **The ability to adjust supply to demand helps make long-term predictions more reliable.** Many people try to make quick money betting on the effects of short-term imbalances; most fail.

What everyone wants is a good return on investment. What determines a "good" return is subjective. A good return for a risk-free government bond may be nothing more than the rate of inflation. In bad times, a good return might only mean not losing value. A good return for an S&P 500 company might be five percent more than government bonds, to account for the higher risk. A good return for an even riskier investment, like a start-up company, might be three or four times the return for an S&P 500 company.

The quality of an investment's return is measured against investment alternatives; it is also bounded by your risk tolerance. Whether you're receiving a good return on an investment is determined by how much risk you have to accept to get that return, and by how much return is provided by investments with similar risks. Investments with similar risks should offer similar returns.

There is a time value to money. A dollar today is worth more than a dollar tomorrow. The longer you have to wait for a dollar, the less that dollar will be worth when you finally get it. Inflation will whittle away that dollar's purchasing power over time. There is also personal value to using a dollar now instead of later.

Investments that tie up money for long periods should offer better returns than more liquid investments. Long-term bonds pay higher interest than short-term bonds. The longer you have to wait for your money, the more money you should receive for waiting. Bond prices are determined by two factors. In the short-term, they're affected by demand. Whenever the stock market has a sharp decline, people turn to bonds for safety. This increased demand pushes up bond prices. Bonds are essentially loans paying a fixed interest rate to the lender (bondholder); the higher the bond price, the lower the interest rate.

For example, XYZ Corp. issues a \$1,000 bond that pays 6% interest, or \$60 a year. Soon after, a bear market in stocks increases demand for bonds. The market price of the XYZ bond rises to \$1,200. XYZ pays their bondholder \$60 interest a year; that payment doesn't change. If you bought the bond for \$1,200, you would only earn 5% interest - \$60 interest payment divided by your \$1,200 purchase price.

The bond market could go the other way, too. If demand for XYZ bonds dropped, the market price might fall to \$800. If you bought the bond at that price, the \$60 interest payment would equal 7.5%.

In the long-term, bond prices are affected mostly by the inflation rate. People delay spending and invest money now only if they expect to have more money (purchasing power) in the future. Delaying spending and having *less* money makes no sense.

When the XYZ bond was issued, inflation was 3% per year; the bond paid 3% over the inflation rate. Since then, inflation rose to 6%. New, similar bonds are paying 9%, 3% over the inflation rate. In order to sell, the market price of the XYZ bond has to fall so the \$60 interest payment equals 9%. That price is \$667.

In this example, a 3% rise in the inflation rate drove the price of the bond down by a third. **Inflation can move bond prices a lot, and not in a good way.** People don't buy stocks to own the hard assets (buildings, equipment, etc.) of a company. **People buy** stocks to own a piece of the future profits (earnings) of a company.

Whether a stock is a good buy or not is determined in large part by its price-earnings (P/E) ratio. This ratio is the market price of the stock divided by its earnings over the past year. A stock's price-earnings ratio is a useful tool, though it measures past performance.

Since investors are buying a piece of future earnings, they want to know the future P/E ratio. Companies and analysts offer future P/E ratios to potential investors, but they are only predictions, not guarantees of anything.

What's a good P/E ratio? For the broad stock market, the P/E ratio has historically been in the 15-20 range; you would pay \$15-20 to get \$1 of earnings. At the height of some bull markets, the P/E ratio climbed to over 30. At the bottom of some bear markets, the P/E ratio fell to below 8. At 30, the market was overpriced; stocks soon fell dramatically. At 8, there were bargains galore. Smart shoppers started buying and moved prices and price-earnings ratios higher.

Companies with bigger growth potential usually have higher P/E ratios. The growth potential for a bioengineering firm is greater than for an automaker. Profits for the automaker may be stable, but they won't rise dramatically. The bio-engineering firm might – might – have a breakthrough that makes profits explode. People will pay more for that potential.

Money and markets never sleep. Events halfway around the world can move markets back home. In the short-term, no one can know if a market – any market – will move up or down. The one certainty is that markets are always moving.

DESIRE vs. REQUIRE

"I just have to have it!"

That statement has been the prelude to countless personal financial disasters. That statement takes something desired and turns it, in the speaker's mind, into something required. Nearly every time it's made, the more correct statement might be, "I really want it."

Why do so many people seem to confuse want with need? Usually, it's not confusion; it's reclassification. By claiming you need something, rather than merely want it, you promote it from luxury to necessity, from desired to required. By definition, no one needs a luxury. There are lots of reasons, many of them financial, why getting a luxury might be a bad idea. But if a luxury is reclassified as a necessity, denying yourself isn't merely wrong – it's inhumane.

The outside world is no help, either. One of the best ways to sell something is to convince people they have to have it – that it's a necessity. Advertising has been doing this since advertising first appeared. Even if you're immune to advertising's lure, peer pressure may effectively convince you that you "have to have it." Your peers may mean no harm, but their pressure can still be harmful.

More often, the pressure is internal. One way to ease the guilt of making a luxury a necessity is to make others responsible. If you convince yourself that a purchase is a necessity to maintain relationships or social standing, any blame shifts from you to them.

If you ask people what are truly necessities, the most common answers are food, clothing, and shelter. These are necessities because no one can live without them, at least not for long.

Food, clothing, and shelter have been necessities for thousands of years. In the 21st century, there are new priorities, and new priorities create new necessities.

The first new necessity is *medical*. Access to proper medical care is likely to save your health, and possibly your life, more than once. That life-saving care may only be available if you're insured. Medical insurance is a necessity because the consequences of not having it are too great to risk.

The next new necessity is *transportation*. Fivehundred years ago, when someone's entire world was within walking distance, transportation wasn't a necessity. In the 21st century, it is.

Even if transportation is only needed to get to and from work, it's a necessity because your job is a necessity of a different kind. Your job provides money to pay for all your material necessities, which makes your job the biggest necessity of all. If your job is your biggest necessity, by extension, every necessity to keep your job is a necessity, too.

The next new necessity is *communication*. Your family may be spread out over continents, and your job may require you to be available at any moment. Accessibility is a necessity in the 21st century.

The final 21^{st} century necessity is a *retirement fund*. This may not seem to meet the definition of a necessity because it deals with a future necessity, not a present one. But a retirement fund is a future necessity that can only be funded in the present. Any future necessity that must be funded in the present is a present necessity.

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Just because something is a necessity doesn't mean there are no spending limits on it. For example:

- Food is a necessity; dining out is not.
- Clothing is a necessity; eighty pairs of shoes are not.
- Shelter is a necessity; a 5,000 square foot home is not.
- Medical is a necessity; plastic surgery is not.
- Transportation is a necessity; a Mercedes is not.
- Communication is a necessity; anything beyond a cell phone and internet is not.
- A retirement fund is a necessity; overfunding it is not, especially if you don't meet other necessities first.

It's important not to overspend by raising necessities to luxuries. It's equally important to adequately cover necessities. Adequate coverage can include:

- Eating healthy foods, even if it costs a little more;
- Buying clothing that serves its purpose;
- Living in a home that's well-maintained and safe;
- Medical insurance that promotes good health, too;
- Reliable, safe, environmentally-friendly transportation;
- Communication that promotes positive relationships;
- Retirement funding that maximizes employer matches.

There is nothing wrong with spending on luxuries, once your necessities are fully covered. Your rewards for hard work are the luxuries of life, not merely life's necessities. But necessities are necessities because they must be covered first, including covering necessities for those who depend on you. If you put what's required before what's desired, you can expect financial peace. If you put what's desired before what's required, you can expect financial disaster.

OPPORTUNITY vs. SECURITY

In the 1930's, during the Great Depression, the federal government created the Social **Security** Administration. In the 2000's, after the attacks of September 11, 2001, the federal government created the Department of Homeland **Security**.

Crisis creates fear. When we're afraid, we seek security. The federal government responded by creating agencies to deal with crises, but also to reduce public fears. The word *Security* in the titles was no accident.

America is the land of opportunity, but we expect our government, first and foremost, to keep us secure. Federal spending reflects this priority:

- 18% goes to Defense and Homeland Security.
- 24% goes to Social Security.
- 24% goes to Medicare and Medicaid.
- 11% goes to programs classified as "Safety Net".

Our government isn't merely giving the people what they want. They recognize that **people need to feel** secure before they can pursue opportunity.

Studies with small children have shown that when children feel secure with their parents present, they will try new things and meet new friends. When the parents leave, these same children become withdrawn and stressed. The children needed security before they could pursue opportunity. Adults are no different.

While opportunity is pursued more when there's a foundation of security, **opportunity and security are often in competition.** Security can provide a floor of protection, but usually also imposes a ceiling of limitations. Opportunity removes the ceiling of limitations, but usually removes the floor, too. We want

a floor of protection *and* no ceiling of limitations. Unfortunately, we usually have to choose between the two.

For centuries, the work people did changed very little. The Industrial Revolution totally changed the world of work. The Technological Revolution has increased the rate of change even more. These changes create opportunities, but they also reduce security.

In 1942, the term *Creative Destruction* was coined. It referred to the process of replacing outdated products, technologies, and jobs with newer, improved versions. The creative part provides opportunities and benefits to society as a whole. The destructive part mostly destroys the security of those whose livelihoods disappear.

Someone with a marketable skill often has a choice of working for a large company or starting their own business. Working for a large company provides a higher level of security. The company can pay a steady income and provide other benefits. The company will likely be in business for the foreseeable future. While opportunities there exist, they are limited, and there is more competition for those opportunities.

Starting a company provides many opportunities, but no real security. Success or failure rests with very few people, maybe just one. Income may fluctuate and not even exist in the early stages. Getting established will be difficult. But while security is nil, the opportunities are far greater. Many *Fortune 500* companies were started by one or two people.

Investing involves similar trade-offs between opportunity and security. If you want your investments to have no risk of loss, their return will be very small – so small it probably won't keep up with inflation. The investments that provide greater opportunities for growth also come with less security. Stocks provide greater opportunities for growth than bonds, but they also have greater risks – another way of saying they're less secure. Small companies have greater opportunities for rapid growth than large companies, but their profits and even their existence are less secure than large companies. The prices of these investments reflect their levels of opportunity and security.

When we're feeling optimistic, we value opportunity over security. When we're feeling pessimistic, we value security over opportunity. When the economy is strong, people feel optimistic. They buy more stocks and buy riskier stocks like small companies with little profit history. When a crisis hits, people feel afraid. They will sell their riskier investments and put their money in risk-free investments like bank CDs and government bonds.

Whether it's the job market or the stock market, each person has to make choices between opportunity and security. Some people are natural risk-takers. They will choose opportunity over security every time. They don't want to be blocked by the ceiling. Some people are very risk-averse. They look for as much security as they can find. They want that floor under them, even if the ceiling is right on top of them, too.

Most of us are in the middle. Whether we favor opportunity or security depends on several factors. The size of the opportunity and the quality of the security both play a part. Age also plays a part. The young favor opportunity; the old favor security. The need to provide security for others, like children, also affects our choices.

Whether it's their careers or their investments, people run into trouble when they misjudge levels of

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opportunity and security. Optimists are likely to overestimate an opportunity and underestimate the importance of security. Pessimists are likely to underestimate an opportunity and overestimate the level of security.

Overestimating opportunity and ignoring security can lead to disaster. A person might leave a good job to start a company without looking at the pitfalls. In a short time, the business fails, and the person is unemployed. Investors who overestimate opportunity will overpay for an investment and will be shocked by the downside. They can be in denial about misjudging the investment and will hang on until it's worthless.

Overestimating security and ignoring opportunity can also lead to disaster, though maybe slower. A secure job with a large company might get eliminated in reorganization. Making only secure investments usually means having to save a lot more and for a lot longer to reach your goals. Sometimes the desire for present security can compromise future security as well as future opportunities.

It's actually risky to expect security from others. Your family and your government may have an interest in keeping you secure, but no one else does. **The only reliable source of security is you**. And the best way to create security is to make the most of every opportunity.

STABLE vs. STAGNANT

Have you ever heard of a "Kodak Moment"? If you're less than a certain age, you may not have, though you may create more Kodak Moments than people familiar with the term.

A Kodak Moment was a term for an occasion that deserved to be preserved with a photo. The Eastman Kodak Company began in 1888 and created personal photography for the masses. Kodak became one of the largest companies in America. For decades it was one of thirty companies comprising the Dow Jones Industrial Average. As late as 1976, 90% of the film and 85% of the cameras sold in the U.S. were made by Kodak.

In 1975, a Kodak engineer invented the first digital camera. Kodak didn't pursue development because they felt it would threaten their film business. By the 1990's, Kodak accepted that digital photography was inevitable. By then, they were well behind the market. Kodak's sales and profits fell as digital cameras got better and cheaper. People stopped buying film, and they avoided inferior Kodak digital cameras. In 2012, 124 years after its founding, Kodak filed for bankruptcy.

Imagine if Kodak had been able to keep photography stagnant in order to keep their business model stable. Photography would be more limited (no phone cameras), more expensive (costly film/developing), and more harmful to the environment (chemicals from the manufacture and processing of film). But Kodak's mistakes were not unique, merely large-scale. Regular people make similar mistakes.

Stable is defined as resistant to sudden change of position or condition; maintaining equilibrium; self-

restoring; consistently dependable. *Stagnant* is defined as not moving or flowing; foul from standing still; lacking liveliness or briskness. In seeking to be stable, Kodak became stagnant instead.

Stable means self-restoring; stagnant means not flowing. The two are incompatible. A lake may have a stable water level, but it isn't stagnant. Water flows in and out constantly, restoring the lake. If the water flow stopped, the water level might remain stable, but the lake itself would become stagnant. Stagnancy breeds instability. Letting something become stagnant in the quest for stability almost guarantees instability.

The S&P 500 Index is composed of 500 stocks of large U.S. companies. In its present form, it has been around since 1957. While the S&P 500 is a consistent indicator of stock prices, the companies in the index change constantly. In a typical year, 20 to 25 companies move in and out of the S&P 500. If the S&P 500 wasn't "self-restoring", it would still include stocks like Pan Am, Woolworth's, and Kodak. By not becoming stagnant, the S&P 500 Index remains stable – and relevant.

People seek stability because they too resist "sudden change of position or condition". The technical term for this resistance is *status quo bias*. Change involves risk. Risk triggers fear. **The biggest fear for most people is that change will make things worse.** Fear of moving backward leads to no movement at all, including moving forward. No movement is one definition of stagnant.

The world is not stagnant, though. The world is always moving forward, though not always smoothly. Staying in the same position means falling behind the world as it moves forward. Stability is measured relative to the world, not in absolute terms. Absolute stability is another definition of stagnant.

This desire for stability shows up in investing. Risk and reward move together. Avoiding risk means avoiding reward, too.

If you were afraid to see your investments drop in value, you could put your money in insured CDs at the bank or in government-guaranteed bonds. The risk would be very low, but so would the reward. Such investments earn so little that inflation eats away their gains. After five years, you would have more dollars, but they would buy less than they could five years ago. You didn't get stability; you didn't even get stagnation; you just got poorer.

Think about your investments, your career, your relationships, even your life, like a lake. On the surface and along the shore, the lake appears to be unchanging. But the lake is never the same from one minute to the next. Water enters and exits. There's constant activity below the surface. The lake's visible stability is the result of invisible, constant changes. Without those invisible constant changes, the lake would change in ways that would be visible and unpleasant – it would become stagnant.

Real stability - financial, professional, and even emotional - comes from imitating the lake. Set boundaries, remain calm on the surface, and constantly restore what you're made of.

MAXIMUM vs. OPTIMUM

Everyone loves an underdog success story, and the story of David and Goliath is the most famous of all. The small shepherd David defeated the giant warrior Goliath and saved Israel. But there's more to the story than that.

David was an experienced shepherd. Shepherds and soldiers both used a sling as a weapon. This sling was not a slingshot as we know it. It was a leather pouch that held a stone or lead ball, with two long strings from which the sling would spin. A skilled slinger could release a projectile at over 100 miles per hour and could be accurate up to 200 yards. An equivalent modern weapon is a 9mm handgun.

Goliath was 6'9", at least a foot-and-a-half taller than the average man of that time. He was also covered in a hundred pounds of armor, making an imposing figure on the battlefield. Goliath's size was caused by acromegaly, a benign tumor near the pituitary gland that results in too much growth hormone. The tumor presses on the optic nerves, impairing vision. The abnormal growth rate also makes a person slower and clumsier than normal. While an imposing figure, Goliath was actually a semi-blind, immobile, immense target facing a trained marksman at close range. He never stood a chance.

Maximum can be an adjective, a noun, or a verb. In all cases, it is synonymous with the greatest, the highest, the most. *Optimum* is defined as the most favorable condition for success. It is synonymous with best. Maximum focuses on quantity; optimum focuses on quality.

Goliath was the maximum warrior. David was the optimum warrior.

There is a natural tendency to seek maximum, rather than optimum. One reason is our belief that, if a certain amount of something is good, then more is better, and the most is the best. If we see *most* and *best* as synonymous, we will see *maximum* and *optimum* as synonymous, too.

It also takes some effort to determine what the optimum is without assuming it's just the maximum. Sometimes the maximum is also the optimum (love being the best example). Usually though, optimum shows up well before maximum. It's a skill to know how far to go without going too far.

Going beyond optimum to maximum can be harmful on its own. An all-you-can-eat buffet is a monument to the maximum, but when you look at America's obesity rate, it's hard to argue that it's the optimum way to eat. Even for something as essential as food, optimum and maximum are not the same.

Defaulting to the maximum instead of calculating the optimum is also wasteful. Whether the resource is time, effort, food, or money, consuming more and achieving less isn't just wasteful; it's stupid.

People tend to fall into one of two groups – maximizers and optimizers.

Maximizers seek perfection in everything they do. While that approach may seem admirable, it's not very sensible. Because perfection is almost never attainable, maximizers tend to be frustrated and unhappy. They will spend resources seeking perfection that go way past the point of diminishing returns. Maximizers also suffer greater buyer's remorse. Whatever they do or buy, they always wonder if there wasn't a better possible outcome. Nothing is ever good enough. Maximizers' obsession with quality reduces the quantity of their achievements. Optimizers don't expect perfection and don't seek it. They look for the best overall outcomes, not the best individual outcomes. Optimizers don't suffer from tunnel vision like maximizers do. Optimizers recognize the point of diminishing returns and will reallocate their resources to another project when they reach that point. Optimizers can be satisfied when something is good enough because that frees them to start something new.

While maximum is associated with quantity and optimum is associated with quality, it's a bit opposite when talking about maximizers and optimizers. Maximizers focus on the quality of their efforts, while optimizers focus on quantity. The end results still align optimizers with quality, though. By being more efficient in the allocation of all their resources, optimizers get more done and add more to their quality of life. They also have more fun and less stress in the process.

Even with money, maximum and optimum are not the same. Great wealth also makes great demands. Beyond a certain amount, more money will not change your life for the better. Studies have shown that once you make a little more than the average, more money does not raise your level of happiness. Sacrifices must be made to accumulate and preserve wealth. **The optimum amount** of wealth is when the benefits of additional wealth are less than the sacrifice needed to obtain and maintain it. You'll know you've reached your optimum wealth when your response to getting more is, "It's not worth it."

The optimum is almost always less than the maximum. But, as David proved with Goliath, less is more. And getting more from less is an excellent way to create the most favorable condition for success.

OWNERSHIP vs. POSSESSION

It happens along beautiful stretches of beach. It happens on mountains with majestic views. It happens by a beautiful stream or a peaceful lake. "It" is a conversation. It starts after a couple has settled into their temporary lodgings at the beach or mountain or lake. Regardless of who starts the conversation, it usually contains some version of the following:

"Isn't this place magnificent?"

"Wouldn't you just love to own a place here?"

And so it begins.

When we come across something we really like, there is a natural tendency to want to own it. This tendency has led to some of the most horrible acts in history. Most wars started because one group wanted to own what others already owned. While no one is going to war for a beachfront condo, that doesn't mean harmful things won't be done trying to own one.

Because of our natural tendency to want to own things, our perceptions about ownership can get skewed. They get skewed when we only see the pros, but go blind to the cons of owning something.

People often fall in love with something, and they'll move heaven and earth to own it. Once they own it, they find ownership is a burden. That burden can kill the love they once had for the thing.

Ownership is the legal right to possess something. Possession is a state of having or controlling something. Ownership and possession both convey rights. Ownership also conveys responsibilities. If you own a cabin in the mountains, you are responsible for paying taxes, utilities, and other expenses to maintain your property. If you rent your cabin, you retain ownership and all the responsibilities, but you turn possession with all its benefits over to someone else.

Many people sacrifice a lot of money and time to own a second home at the beach or the mountains. They then feel they have to spend all their spare time at their second home to justify the sacrifice. When they're at their getaway, they don't get away – they spend time doing repairs and other chores. They may rent the house out part-time to defray some of the costs, even though they don't like having strangers in their home.

In such cases, the owner often gets all the responsibilities and few of the benefits, while the possessor (renter) gets all of the benefits and none of the responsibilities. The renter gets to enjoy the property and simply leave when time is up. The renter is also free to go someplace else next time.

It's true the possessor pays rent to the owner. The renter feels the rent is reasonable to possess the property for that time; if not, he/she wouldn't rent it. The owner, on the other hand, may not get enough rental income to justify the expense and reduced use of the property.

Very often, in the overwhelming desire to own something, we find ourselves owned by that very thing. This is often the case when we make great sacrifices to own something we merely want but don't need. This is especially true if these things carry big price tags, like second homes or luxury cars.

How can you know when it's better to opt for possession over ownership? The first step is to recognize that possession may be what you're really after most of the time. When you think about a condo at the beach, what attracts you? Is it the views and sounds and peaceful walks at sunset? Or is it seeing your name on the deed (and mortgage) and bragging that you own a condo at the beach? Your answer can tell you whether ownership or possession is really what you want.

Speaking of bragging, being able to tell everyone "It's mine!" is a big motivation to own something. It's also a poor reason to take on the burdens of ownership. When contemplating buying something, ask yourself a question. Would you want to take on the expense and responsibility of owning it if you couldn't tell a soul about it? Your answer can tell you whether ownership or possession - or neither - is really what you want.

If something appreciates in value, ownership may be better; if it depreciates in value, possession may be all you want. You want to own stocks because they should appreciate in value, making ownership profitable. You may not want to own an expensive car that will lose half its value in the first two years.

Owning a home, as opposed to renting, makes sense if owning it will be better financially in the long run. Knowing the answer requires calculating all the costs of ownership and estimating how much equity you will build over time. Those numbers have to be compared with what you would pay in rent over that same time. The differences will help determine whether renting or owning is better for you.

Ownership can offer many benefits, psychological and financial. Ownership can provide a sense of security along with a way to build wealth. But ownership has costs that go beyond money – costs in time, stress, and lost opportunities.

Before you pay all those costs to own something, take a critical look at *why* you want to own it. You may find that, while you thought you wanted to own something, mere possession will really make you happier.

CURRENCY vs. PURCHASING POWER

If you're old enough to read this, you've probably seen *The Wizard of Oz*. The movie was adapted from a book written by Frank Baum in 1900. While the movie is well-known and well-loved, much of its symbolism is less well-known.

In 1900, the U.S. was just emerging from a period of depression and deflation. Prices had fallen by 22% in the previous 16 years. Farmers were hit especially hard.

The U.S. was operating on a gold standard - it tied the value of the dollar to gold and tied the money supply to the gold supply. Farmers wanted a dual standard - money backed by gold *and* silver. A dual standard would have increased the money supply, raising prices and reducing farmers' debt burden.

Some of *The Wizard of Oz*'s symbolism includes:

- Dorothy: Everyday American
- Scarecrow: Farmer
- Tin Man: Industrial Worker
- Lion: William Jennings Bryan, politician of the era
- Wizard of Oz: U.S. presidents of the era
- Emerald City: Washington, D.C.
- Oz: short for ounce, a measure of silver and gold
- Yellow Brick Road: Gold standard
- Ruby Slippers: They were silver in the book; ruby looked better for a technicolor movie

The dual standard was never adopted, and the U.S. went off the gold standard in 1971. Today, money supply is determined by the Federal Reserve. A bigger supply can stimulate the economy, but cause inflation; a smaller supply has the opposite effect. The government manages the economy by managing the money supply.

The only restrictions on our money supply today come from people, not natural resources. Today, no major world currency is backed by gold. The benefit is economies are not restricted by their gold supplies. The risk is governments will finance spending by printing money, which they prefer over tax increases. Inflation can result if the money supply increases faster than goods or services available for purchase.

The ancient Romans extended their empire further and facilitated trade within the empire with a standard currency. It is said that the coins used to flow from the Roman mint in a constant stream. The Latin word *currere*, which means to flow, was used to describe the stream. Our word *currency* comes from it.

We tend to equate money and money supply with currency. It's better to equate money with *purchasing power*. Money, currency, and purchasing power may seem synonymous, but purchasing power can change drastically, even when the currency is unchanged.

Seeing money as currency and not as purchasing power can lead to mistakes. You may end up sacrificing the purchasing power of your money in order to protect the currency that represents it.

Here's an illustration. You have \$100 that you can either spend now or save for a year. Saving earns 3% interest; in a year you will receive \$103. Inflation is 4%; what costs \$100 now will cost \$104 in a year.

You decide to save to get the increase from \$100 to \$103. Even though you will have more currency in a year, you will have less purchasing power. You will need \$104 to buy what \$100 bought a year ago, but you only have \$103. You also waited a year to enjoy what you bought. Delaying gratification to have more currency is senseless if delay decreases purchasing

power. Saving should be done to increase purchasing power, not just currency.

In uncertain economic times, people look for "safe" places to put their money. By safe, they mean the preservation of their currency. In many cases, they pay a high price for safety.

The difference between \$103 and \$104 isn't much. It's the decline of purchasing power over decades that can really cost you.

Retirees often have a choice between "safe" options that have a stable amount and options that can fluctuate. If someone were retired for 25 years and their income were a "stable" amount, their purchasing power might be cut in half over that time. The currency they received every year was unchanged, but their purchasing power got hammered. Stable money isn't stable if it buys less over time. **The only measure of money's stability is its purchasing power over time.**

The cost of living varies widely around the U.S and around the world. If you were offered jobs in Des Moines, Iowa and San Francisco, the San Francisco job would likely pay more. The higher pay would be tempting, until you looked at what you could buy.

The San Francisco job might pay 30% more. But the cost of housing might be 300% more. Taxes might be 180% more. Almost everything would cost significantly more in San Francisco than Des Moines. You would receive less currency in Des Moines; you would have less purchasing power in San Francisco.

Wealth is not pieces of paper or digits in a ledger. Wealth is what the paper or digits can obtain for you. Currency is a representation; purchasing power is the real thing. Wealth is not measured by currency; it's measured by purchasing power.

FUTURE VALUE

HABITUAL OFFENDER

Every day over 100 million women do more physical work to avoid doing more mental work. These women are on "the pill". The birth control pill has been available since 1960. It is the most successful contraceptive in history. The prescription requires taking a combination of estrogen and progestin in pill form daily for 21 days, then discontinuing dosage for 7 days. Almost all prescriptions are packaged with 28 pills - 21 active pills and 7 placebos, identified by different colors.

Women can choose not to take the placebos, though most do. It's easy to take a pill a day for a week. It's harder to remember to start taking the active pills after a week off. The mental effort to remember combined with the consequences of forgetting make taking the placebo the smart choice. Taking the pill daily is easier because it becomes a *habit*.

Humans think in two different ways - one intuitive and automatic, the other rational and reflective.

The automatic system relies on instinct rather than thought. When you react to a clap of thunder or a baby's laugh, you're using your automatic system. The reflective system is thoughtful and deliberate. You're using it now to read this sentence. When you develop a skill, an unstated goal is to raise the exercise of that skill from reflective to automatic. Skills at that level appear instinctive because they've become instinctive.

Habits are controlled by our automatic system. We develop habits so we don't have to think about what we're doing. Almost by definition, if you have to think about doing something, it isn't a habit. Tasks you do automatically (brushing teeth, making coffee, etc.) are habits. They're handled by your automatic system.

More than forty percent of your actions are habits, yet nothing ever begins as a habit. At some point, you made conscious decisions about everything you do that's now a habit. You chose a particular action and repeated it. In time, it became automatic. Once the behavior became automatic, a habit was born.

Habits develop so we can think less. Anything that enables the brain to work less will automatically be endorsed by the body. Habits also develop automatically without conscious thought. You don't have to give your approval for a habit to form.

The habit will form as long as there is:

- a routine that can be followed
- something to cue that routine
- positive reinforcement or the absence of negative reinforcement.

Your body doesn't distinguish between good and bad habits. Unfortunately, bad habits usually have better immediate rewards than good habits. Watching TV feels better than jogging. Spending feels better than saving. Bad habits form because we like their rewards. We go after the reward again and again until we've created a habit.

Good habits also have rewards. Unfortunately, most good habits have rewards on a time-delay. Exercising makes you look and feel great, but it doesn't happen overnight. A donut tastes good right now. Saving money gives you a feeling of independence and security, but it takes time to save enough to get that feeling. Spending money feels good right now.

Bad habits have downsides; it's why they're bad. The downsides rarely occur immediately; if they did, you wouldn't repeat the behavior and create a habit. The downsides (obesity, alcoholism, bankruptcy, divorce, etc.) occur later. By then, even though you want to break the bad habit, it's so ingrained that breaking it requires extraordinary effort.

One of the best ways to break a bad habit is to replace it with a good habit. We seek rewards, including rewards that may be harmful in the long term. Breaking a bad habit may remove a long-term negative, but it also removes a short-term positive. A bad habit is more likely to stay broken if a new positive is added.

A habit starts with a cue, such as the alarm clock going off. The cue is followed by a routine, such as eating a donut. Positive reinforcement follows, such as savoring something tasty.

Bad habits can be replaced with good habits by changing the routine in the middle. The cue (alarm clock) is still there. Eating something tasty *that's also healthy* is the change in routine. The positive reinforcement of savoring something tasty is still there. It's easier to break the morning donut habit by eating something better than eating nothing at all. Replacing is more effective than removing.

Some habits matter more than others. Some habits are capable of changing other habits. These are known as *keystone habits*. A positive change in a keystone habit can pay unexpected benefits in seemingly unrelated areas.

Physical exercise is considered a keystone habit. Once people begin an exercise habit, they reconsider other habits that can undo the progress made by exercise. Financial exercise is another keystone habit. Financial exercise does for your finances what physical exercise does for your body. You can create your own financial exercise routine. You might begin by saving 1% of your income. Then you work to pay off all credit card debt. Then you develop a budget. You follow that by getting properly insured for life, health, and disability. Your financial exercise routine, like your physical exercise routine, should be designed to provide the maximum benefit for the effort. It should enable you to keep the routine going until it becomes a habit. And like physical exercise, you can increase your effort as you get better at it.

Financial keystone habits not only provide benefits on their own, they also deter you from developing bad financial habits. If you're proud of your habit of saving regularly, you are less likely to raid savings for an impulse purchase. If you've paid off your credit cards, you are less likely to succumb to new credit card debt. If you developed a budget, you'll monitor your spending more closely. If you have health, life, and disability insurance, you are less likely to engage in behavior that would increase their cost or lead to cancellations.

It doesn't take any more effort to create a good habit than a bad one. However, **bad habits give a small reward now and exact a large price later. Good habits exact a small price now and give a large reward later.**

We are creatures of habit. Habit can be your greatest helper or your heaviest burden. It can push you on or drag you down. It can lead you to profit or to ruin. You're a creature of habit, but you choose what kind of creature you will be.

FUTURE VALUE

THINKING ABSOLUTELY; NOT RELATIVELY

More than a half-century has passed since President Johnson declared a "War on Poverty". In the six years before the 1965 start of this war, the poverty rate in the U.S. had declined from 22% to 15%. Since then, the poverty rate has never been below 12% and still hovers around 15% most years. More than fifty years of effort hasn't moved the needle.

These figures are for *absolute poverty*, which measures poverty against a fixed standard. Those defending current anti-poverty programs prefer to look at *relative poverty*. They cite economist John Kenneth Galbraith, who said, "People are poverty stricken when their income, even if adequate for survival, falls markedly behind that of their community."

Relative poverty really measures income inequality. Relative poverty could drop by making the rich poorer. Relative poverty could drop even if *everyone* has less money, including the poor. If everyone is getting richer, absolute poverty falls. But, if the rich are getting richer faster (which is typical), relative poverty rises while absolute poverty falls. With relative poverty, rising tides do not lift all boats.

The poor today may feel unhappy when they look at their relative position. However, of those classified as poor today, 99% have electricity, running water, a refrigerator, and flush toilets; 97% have a television and a telephone; 78% have a car and air conditioning.

Cornelius Vanderbilt was one of the first railroad tycoons of the 19th century. He built Grand Central Station in New York. He was worth \$100 million when

he died in 1877 and is considered the third richest man in American history. He had none of the items listed previously. Neither did many Americans in the Eisenhower era. A deeper look at relative poverty finds that the poor in America actually live better than 99.9% of humanity throughout history.

Despite one of the highest standards of living, Americans are not measurably happier than people in other countries. We're happier than people in Egypt, but not Mexico. Our higher standard of living does not lead to a higher level of happiness.

If you compare your situation to those with more, you'll feel resentful; compare to those with less, you'll feel grateful. People let happiness hinge less on what they have in absolute terms and more on what they have relative to others - typically family, friends, and peers.

Possessions help orient us in our social worlds because they imply status and wealth. When we view someone's possessions, we form impressions and calculate how to interact with them. We defer to those with greater wealth, or at least the appearance of greater wealth.

As we climb the socio-economic ladder, we change our peer group, and we spend more to keep up with them. The goal is to seem better off, but moving upscale works against that.

Your sense of financial security largely emerges from how you appraise three gaps in your life:

- the gap between what you have and what you want;
- the gap between what you have and what you think others have;
- the gap between what you have and the best of what you had in the past.

The larger the gaps, the greater your insecurity.

Your sense of financial security can be improved in several ways. You can simply want less by being grateful and content with what you have. You can close the gap between what you have and what you think others have by recognizing their fraud. Boasting is easier than confessing, so people parade their assets and bury their liabilities. You can close the gap between your past and present by looking closer at the negatives of your past and the positives of your present.

University of California professor of psychology Sonja Lyubomirsky studied how happy and unhappy people react differently if they compare themselves to others. Her findings are revealing.

When working with a peer on a project, happy people were only slightly affected by their performance relative to a peer. If they did better than their peer, they felt slightly better about their performance. If they did worse than their peer, it did not affect whether the person felt good about his/her performance. The happy person could still appreciate an improvement in their performance of a task, even if someone else performed better.

Unhappy people, by contrast, did not feel better about an improved performance if a peer had a better performance. Unhappy people were too busy comparing themselves to their peers, instead of to their own previous performance. Happy people focused almost exclusively on how they compared to themselves, not how they compared to others.

These studies showed that unhappy people spend a lot of time comparing themselves to other people, which is probably why they're unhappy. Happy people realize the only person they have to be better than is the person they are right now. To sum up:
FUTURE VALUE

Thinking Absolutely ⇒ Happy Thinking Relatively ⇒ Unhappy

Most millionaires are millionaires because they don't care what other people assume about their wealth or lifestyle. They don't compare themselves to others, and they ignore those who do. Spending time making comparisons to others won't improve your performance. You will only frustrate yourself when you compare to "superiors," and delude yourself when you compare to "inferiors". **Don't worry about** *being* **the best**. *Doing* **your best is more than enough.**



A BUCK IS A BUCK

Laura and Anthony weren't having much luck in Vegas. In two days they had lost more than \$1,000 in the casino. After Laura had gone to bed, Anthony was packing and discovered a \$20 chip in a pocket. He decided to take one last crack at the roulette table.

He placed his chip on number 14. The ball hit 14 and the bet paid \$700 at 35-1 odds. Anthony let it ride on 14 and it hit 14 again. He was up to \$24,500. He then bet it all on number 23. It hit 23. Anthony was now up to \$857,500. This time he bet it all on number 6. It hit 28. Anthony was crushed - and broke once again.

"Where'd you go?" Laura asked when he returned.

"I was playing roulette."

"How'd you do?"

"I lost \$20."

Anthony reasoned that he only lost \$20 as a defense. The thought of losing fifteen years' salary in one spin of the wheel might have made his head explode.

Anthony's reasoning is one reason why casinos are so profitable. In gambling parlance, the casino is known as the house, and the house always wins. The house wins in large part because **people are much more careless with their winnings than they are about money they worked for.** Gamblers like Anthony think of their winnings as "house money", not their own. They are far more reckless with it, which is why it almost always ends up back with the house.

Anthony was guilty of *mental accounting*. He saw the money he won as different from the money he brought with him to Vegas. He was probably more upset about losing the \$1,000 he worked for than the \$857,500 that luck handed him. Anthony couldn't imagine betting even one percent of \$857,500 if it was his own hardearned money. But he didn't give a thought about betting a fortune when it didn't feel like *his* fortune.

It's easy to criticize Anthony, but we're all guilty of mental accounting to various degrees. Money is, to use an accounting term, *fungible*. Fungible means identical items can be substituted for each other. Any dollar bill can substitute for another dollar bill. It also means that **a dollar won at the roulette table, a dollar Grandma gave you, and a dollar earned digging ditches all have the same value. If they all have the same value, they should all be treated the same.** But they rarely are.

Most of us are careful about spending our paycheck. We know how hard we work for that money, and we don't want to be stupid with it. But if we get a big tax refund, we're much more likely to do something stupid with it. The tax refund feels like found money; we weren't planning on it, so we didn't make plans for it. We give ourselves permission to be stupid, even though that money is part of the money we worked hard for. Because that money spent time with the government, we now think about it differently. More important, we treat it with less respect.

It's even easier to do mental accounting with money from the future; in this case, credit cards. Not only do people buy things on credit that they wouldn't buy for cash, they also pay an average of 17% more for items bought on credit compared to paying cash. When you buy something with a credit card, you don't pay for it until later. You also get the credit card back. When you pay cash, you have to hand over bills. You feel the cost right away, which can make you stop and think if you really want that item and at that price. If you have money sitting in a bank earning 1% interest, and you also have credit card debt at 12% interest, you're guilty of mental accounting. If you saw the dollars in each as the same, you wouldn't loan your money at 1% interest and then borrow it back at 12%. That can only happen if you see the dollars differently.

Size matters, too. Studies have shown people are more careless with small windfalls than big ones. If you received a \$500 windfall, you might blow it over a weekend. If you received a \$50,000 windfall, you might pause and think about the long-term impact the money could have. You'd be less inclined to be frivolous with it, even though you had far more to be frivolous with.

Mental accounting can cause us to be too careful with money, as well as being too frivolous. Money that is earmarked for a specific purpose may not get invested properly for fear of losing it. A child's college fund, a retirement account, an inheritance from Grandma - we may be so worried about losing these funds that we never give them the chance to go to work on our behalf.

If you're inclined to be careless with money, to spend some dollars more frivolously than others, try this. Imagine every dollar you're spending is the dollar you worked hardest for in your life. Remember the dirtiest job for the lowest pay you ever had and treat your dollars like they came from that.

If you already treat every dollar like you sweated blood to earn it, try designating some portion of your money for frivolous purposes. Your money, like your time, should be allocated to meet your needs but fulfill some wants, too. A buck is a buck. Treat them all with equal respect, and they'll reward you equally in whatever way they serve you.

NUMERATORS AND DENOMINATORS

If you were alive during World War II, in which of these countries would you be most likely to die?

- China 20,000,000 deaths
- Japan 3,000,000 deaths
- India 2,000,000 deaths
- Greece 700,000 deaths
- Latvia 220,000 deaths

You quickly notice many more Chinese than Latvians died in World War II – about 90 to 1. China would seem the most likely place to die and by a wide margin.

You don't yet have all the information you need to answer the question. The question wasn't which country had the most deaths; it was where you would be *most likely* to die. You need more information. You need to know the countries' populations at that time:

- China 518,000,000
- Japan 72,000,000
- India 378,000,000
- Greece 7,200,000
- Latvia 2,000,000

You now have enough information to calculate where you would be most likely to die. Here are the odds of dying by country:

- China 1 in 26
- Japan 1 in 24
- India 1 in 189
- Greece 1 in 10
- Latvia 1 in 9

A Latvian was almost three times more likely to die during World War II than a Chinese. The number of deaths was the numerator. The population was the denominator. To know your odds of dying, you had to know both numbers. (FYI – the odds of an American dying in WWII were 1 in 312.)

Whether talking about fractions, ratios, or odds, they're made with numerators and denominators.

We tend to pay more attention to numerators than denominators. Numerators are like the flashy hype you see in a commercial. Denominators are like the legal disclaimers they throw in later. **Numerators excite. Denominators clarify.**

Because numerators excite, they can cause us to overreact. We hear a news story of a random murder, and we buy a gun for protection. The odds are about 1 in 90,000 that you would be killed by a stranger this year. The odds are about three times greater that you would be killed by someone you know. For each person murdered by a stranger, more than a hundred people will die from smoking. The murder numerator is much smaller, but it screams louder and frightens us more.

Ignoring the denominator can cost us when it comes to purchases like insurance. People often buy flight insurance which pays a death benefit, but only if their flight crashes and they die. The odds are much greater they would die driving to the airport than they would in a plane crash. People also buy life insurance but don't buy disability insurance. Even though they're fifteen times more likely to become disabled than to die before they retire, it doesn't motivate them. Death is a scary numerator and a strong motivator.

Most of us live in states with lotteries. The weekly lotto jackpot is broadcast to lure players. You buy a ticket thinking your odds are as good as anyone's. Your odds may be as good as anyone's, but your odds are also

about 1 in 175,000,000. The numerator giveth; the denominator taketh away.

You may look around and see dozens of successful businesses started by people just like you. You decide, if they can succeed, so can you. You may very well be right, but you've only looked at the numerator. The denominator would tell you that, for every successful business you see, nine businesses failed in the first three years. Knowing the denominator might actually increase your chances for success. You now know what you're up against and what it will take to succeed. **Denominators help kill delusions created by the numerator.**

You may be considering a job with two different pay options. One pays a straight salary of \$60,000 per year. The other pays a commission ranging from \$30,000 to \$90,000. Which one should you take? To answer, you need to know the odds of earning the various commissions. As a start, if the odds are better than 50/50 that you'll make more than \$60,000, the commission job is probably the better choice.

Numerators and denominators, in the form of ratios, are some of the most important tools in financial analysis. If you were thinking of investing in a company, you would want to look at several financial ratios: price ratios, profitability ratios, liquidity ratios, debt ratios, and efficiency ratios. Perhaps the most important of all ratios is the *price-earnings ratio* - the price of the stock divided by the past year's earnings. It can indicate if a stock is overpriced or underpriced. It's a good starting point.

Others use numerators and denominators to evaluate you. If you apply for a loan, especially a mortgage, a lender will look closely at your debt to income ratio. The numerator is your monthly debt payments; the denominator is your monthly income. If the ratio is more than 36%, you may be turned down or have to pay a higher interest rate.

When seeking a target ratio between numerator and denominator, changing either will change the ratio. For your debt to income ratio, you can lower your ratio (and improve your chances for a loan) by reducing debt or by increasing income. If your income isn't rising, you would use income as a denominator and calculate the numerator that gets the ratio to 36%. Your goal would be to reduce your monthly debt payments to that number.

You can't calculate the odds if you don't know the numerator and the denominator. When we want something badly, we're inclined to bend the facts to our favor. By tweaking numerator and denominator, we can bend the facts and make the odds appear better. But even though you can torture numbers until they say what you want, that doesn't make it the truth.

Looking at numerator and denominator lets you calculate the odds and make comparisons. Looking at numerator and denominator lets you know what you have to do to reach certain financial goals. Perhaps more important, looking at both numerator and denominator enables you to reduce numerator noise and put it into proper perspective.

LOSS AVERSION

Your football team is leading by ten points late in the game. They built this lead with consistent offense and aggressive defense. They've blitzed the opposing quarterback and disrupted his passing game all day. But with five minutes to play, your team shifts to the "prevent" defense. They stop blitzing. They focus on preventing a long run after a short completion. The other team scores a quick touchdown, then holds your team to three-and-out. The opponent then moves down the field with a series of short sideline passes your defense willingly concedes. They score the winning touchdown on the final play. Once again, your team has snatched defeat from the jaws of victory.

What prompts a coach to change what worked and replace it with a strategy that prevents nothing but victory? Coaches and the rest of us may love to win, but we hate, hate, HATE to lose. It's painful.

There are actually two kinds of pain at work here – the pain of losing and the pain of loss.

The pain of losing is fairly simple. Certain activities, like competitive sports, require a winner and a loser. If you choose to compete, you accept the possibility of losing. Other than in wars, the pain of losing is a risk we usually accept freely. It's not nice, but it's not unexpected.

If the pain of losing is unbearable to you, you can:

- not compete
- drive yourself to always be the best (not realistic)
- cheat (not recommended)

It hurts more to see your team blow a late lead than it does to see them mount a comeback that falls just short. It hurts more because blowing a late lead not only brings the pain of losing; it brings the pain of loss.

The pain of loss is felt when we had something and then we didn't. When our team blows a late lead, we feel that victory was ours, and then it wasn't. We didn't feel that way with the comeback that fell short.

Even those who aren't fans of poetry are familiar with the words of Alfred Lord Tennyson: "Tis better to have loved and lost than never to have loved at all." It's a romantic notion. It's also wrong.

If you ask people who've loved and lost if the pain was worth the experience, you'll get mixed answers. In the midst of the pain though, most would remove the experience if it would remove the pain. Tennyson was also referring only to lost love and nothing more. Certainly, it's not better to have loved and lost a child than to never have had a child to love at all.

Loss aversion can affect us whenever we feel we have something to lose. Loss aversion is a major reason why people resist change. Change might make things better, but it might also make things worse. Making something worse is felt as loss. We also feel worse about a change we made that didn't work than a change we didn't make that did work. We feel greater responsibility for our actions than our inactions.

Our feelings about gains and losses affect decisions more than the amount of gain or loss. The more we sacrifice for something, the more we resist losing it, and the greater the feeling of loss if we do. In most wars, the losing side continues fighting well after defeat is inevitable. Losses also escalate toward the end. Loss aversion by the losing side leads to even bigger losses.

People are cautious when it comes to gains. Given the choice of a sure \$100 gain or double-or-nothing on a

coin toss, the great majority will choose the sure \$100. They view the coin toss, not as a chance to win \$200, but as a chance to lose a sure \$100 gain.

In a reverse situation, people become risk takers. Given the choice of a sure \$100 loss or double-ornothing on a coin toss, the great majority will choose the coin toss. They view the coin toss, not as a chance to lose \$200, but as a chance to avoid a sure \$100 loss.

People feel the pain of loss more than they feel the pleasure of gain. Some studies estimate that **losses have twice the psychological impact of comparable gains.**

When it comes to investing, loss aversion can be a two-edged sword. When investments drop in value because the market has dropped, the fear of seeing it drop further causes many people to sell at a loss. Oddly, they accept a sure loss to reduce the possibility of further loss. Of course, until they sold, it wasn't loss; it was only price fluctuation.

The other edge of the sword comes from hanging on to an investment that has tanked. This is more common with an investment the investor personally selected. People can get emotionally as well as financially invested in something. If the investment turns out to be a mistake, the investor may be in denial about its condition and deluded about its prospects.

With investing, loss aversion leads many people to sell their winners and keep their losers. This is not a formula for financial success.

Loss aversion leads people to throw good money after bad. A business venture that isn't making it can feel like an army losing a war. A realistic view would see the futility of wasting more resources on a lost cause. But the emotional investment taints the view of the financial investment. Money gets spent until the money runs out. Loss aversion can be good in many situations. In the early stages of mankind, loss aversion was a necessary trait for survival. The gains to be made from taking risks were small compared to the potential loss of life. Loss aversion is still important today when it keeps you from taking unnecessary risks.

When it comes to money, loss aversion can hurt us more than it helps us. It can cause us to bail on a good thing that's going through a bad spell. It can cause us to hang on to a good thing gone bad because we want it to be good again. It can cause us to go when we should stop and to stop when we should go. It can cause us to change strategies that have worked, like the coach switching to the prevent defense. It can snatch defeat from the jaws of victory.



FRAMING ANCHORS

Pakistan and Bangladesh are two countries that straddle India. They were known as West Pakistan and East Pakistan until Bangladesh broke off and became independent in 1971. Pakistan has a population of 200 million as of 2015 and an area of 796,095 square miles. Bangladesh has an area of 143,998 square miles. What is the population of Bangladesh?

Chevrolet priced the 2016 base Corvette sports car with 460 horsepower at \$56,000. They also offered a 650 horsepower model for \$80,000. Porsche priced the 2016 base 911 sports car with 350 horsepower at \$82,000. They also offered a 560 horsepower model. What was the price for this model?

How did you estimate Bangladesh's population? You probably assumed Bangladesh's population density is similar to Pakistan's. That would make their population about 1/5th of Pakistan's, or about 40 million. Is that close to your estimate?

How did you estimate the Porsche's price? Porsche charged \$228 per horsepower for the base model. If they charged that much for each additional horsepower, the price for the higher model would be \$127,680. Is that close to your estimate?

The population of Bangladesh is 170 million. The price of the 560 horsepower Porsche 911 was \$183,000.

You probably underestimated both numbers. If you did, you were affected by *anchoring*. Anchoring occurs when people are influenced by a number that may have no bearing on the number they actually seek. If you adjusted your estimates when you saw my estimates, you anchored a second time.

Most people would use the population of Pakistan and its relative size to Bangladesh as anchors to estimate Bangladesh's population. Similarities were assumed that weren't there. Most people would use the perhorsepower cost of the base Porsche as an anchor to calculate the cost of the higher model. That would seem logical, especially since the Corvette's per-horsepower costs were consistent from model to model.

We're subjected to anchors all the time. On Ebay, you'll see a "Buy It Now" price. That's an anchor. If you shop for a house, you'll see a listing price. That's an anchor. If you look at a wine list, you may see one wine that's much more expensive than the others. That's an anchor. These and hundreds of other anchors influence what you think a number should be.

Sellers will set a high anchor even though they don't expect to get that price. The high anchor forces the buyer to pull down harder on that price to get close to a "fair" price. Most people don't pull down enough before giving in.

For example, a man is selling a classic car. The price range for this car is \$40-60,000. He offers it for sale for \$70,000, though its value is \$50,000. Buyer and seller finally agree at \$55,000. The buyer paid more than its value, but he's happy because he paid far less than the asking price, the anchor. The seller is happy because a high anchor netted him an additional \$5,000.

Anchors are strong influencers when people give to charities. In one study, people who had no anchor said they would give an average of \$64 to a particular cause. When a \$5 anchor was suggested, the average donation dropped to \$20; when a \$400 anchor was suggested, the average donation rose to \$143.

Anchors can have an unintended effect, too. Some courts put a cap on awards. Setting a \$1 million cap on jury awards does reduce huge awards. It also increases the smaller awards because \$1 million becomes the anchor in smaller cases.

An anchor can work against us when we sell something. If you paid \$200,000 for a house, that's your anchor. If the market price is less, it will be hard to sell at that lower price. If your neighbor just sold a similar house for \$300,000, that will become your anchor. Sellers look for high anchors; buyers for low ones.

Anchoring is common in investing, too. It's hard to sell a stock for \$35 a share when you paid \$50. It's also hard to sell it for \$60 a share, even when you paid \$50, if last month it was selling for \$70. Which anchor you choose determines whether you'll see the sale as a \$10 gain or a \$10 loss per share.

Let's return to the Corvette-Porsche comparison. Suppose you really wanted a new Corvette, but your significant other was not on board. To make your case, you compared the Corvette to the Porsche. You pointed out the high-horsepower Corvette cost less than the base Porsche, so it was really a good deal. The answer was still no. You then offered to "settle" for the base Corvette (which is what you really wanted all along).

You *framed* your argument to make your case. Framing takes a situation and puts it in a certain context. When we practice framing, we put something in a context to best serve our purpose.

Your significant other had been building frames, too. Your Corvette was now compared to a Honda Civic. The Civic was more fuel efficient, cost about one-third of the Corvette, and even came with a back seat. Practical frames like this are particularly hard to break. **Framing involves taking carefully selected anchors and using them to bolster our case.** The Porsche was an anchor to frame the Corvette as a bargain. The Civic was an anchor to frame the Corvette as an extravagance.

Framing is used to make risks seem larger or smaller. For medical treatments, saying the survival rate is 90% sounds much better than saying the mortality rate is 10%. The statements say the same thing, but the first one is encouraging; the second one is frightening.

Framing is important in your finances, too. You're more likely to maintain a regular investment program if you're told that your chances of reaching your goal are 90%, rather than saying your chances of failure are 10%.

The anchors you choose and the frames you make will have a large effect on both your financial and overall well-being. Being aware of anchors and framing is a good start. Awareness enables you to use anchors and framing to make your case and get what you want. Awareness also enables you to spot when others are using anchors and framing to get what they want at your expense.



Finally, anchors are used to restrain, and frames are used to enclose. Their symbolism is valid here. Anchors and frames can restrain our thinking and enclose from other US perspectives. There is potential for damage when others use them against you. The greater potential damage may come from your own anchors and frames.

FUTURE VALUE

VALUE VALUE

Value (*verb*): to consider someone or something to be important or beneficial; to have a high opinion of.

Value (*noun*): the regard that something is held to deserve; the importance, worth, or usefulness of something.

In Oscar Wilde's play, *Lady Windermere's Fan*, Cecil Graham and Lord Darlington have a conversation: Cecil Graham: *What is a cynic?*

Lord Darlington: A man who knows the price of everything, and the value of nothing.

Cecil Graham: And a sentimentalist, my dear Darlington, is a man who sees an absurd value in everything and doesn't know the market price of any single thing.

Although Wilde's play was first produced in 1893, people are still the same. We still have cynics, people who see only price, but not value. And we still have sentimentalists, people who refuse to recognize price as one measure of value.

Value is very subjective; price is much less so. Value can also be expressed in terms other than money. When someone says "I would sacrifice my life for my child." they are valuing their child with the most valuable thing they have – their own life. They probably wouldn't make such a sacrifice for a stranger.

Value and price intersect when transactions occur. Buyer and seller don't usually start with equal values. They need to find a price acceptable to both. Money as a medium of exchange makes it easier to find that acceptable price. Everyone is familiar with money - it doesn't require conversion or translation.

A big obstacle to finding an acceptable price is the seller's perspective. We value what is ours more than others do - a condition known as the *endowment effect*. One example was just given about the value given to one's own children, but not to a stranger.

A better example is your home. When you live in a house for a while, it becomes *your home*. When you offer it for sale, others will value it as a house for sale, not as *their home*. Different perspectives lead to different perceptions of value and different offer and bid prices. Unless the seller reconciles the value as home with the market's value as a house, no sale will occur.

When Cecil Graham describes a sentimentalist, he's actually describing people under the endowment effect. We're sentimental about things that touch us personally, and many of our possessions are very personal. We will place an "absurd value" on something that touches us personally (a photo, a gift, a home). That value has no relationship to the "market price" others give it.

When Lord Darlington is describing a cynic, he's describing people who can only evaluate something based on market price. These people have the opposite problem of the sentimentalist. The sentimentalist assigns value by personal assessment, ignoring outside opinions. The cynic can't or won't assign a value and uses market price alone.

A sentimentalist might continue to own a stock that fell in price and was expected to fall more. The sentimentalist couldn't ignore the original value and focus on current value. The cynic, on the other hand, might rely on the current price as the final word on the stock's value. The cynic would sell the stock when the price fell, even if long-term prospects for the stock were excellent. In both cases, their perceptions of value can cost them.

When price is confused with value, one of two problems can occur. The first one is overpaying for something because it has a high price. High price is associated with equally high value, which may not be the case. It's easier to raise the price than to raise the quality; it's more profitable too, at least in the short run.

The other problem is the opposite – looking only at price and thinking the best value is the one with the lowest price. Another term for lowest price is cheapest. *Cheap* is defined with terms like small value, poor quality, inferior, devalued, and not worthy of respect. If someone calls you or something you own cheap, it's not a compliment.

For many items, value is better measured in utility than price. For example, a man is shopping for a suit. He narrows his choice to two; both are three-button, single-breasted, navy blue. They're made of different materials and by different manufacturers. One suit is \$200; the other is \$400. Which is the better value?

If our shopper only uses price to determine value, he would only consider the \$200 suit. Price alone doesn't tell him all he needs to know. There's probably a good reason why one suit costs more.

The more expensive suit uses much better materials that maintain color and shape and don't wear as quickly. The stitching is straighter and stronger. The fit is better. The superior quality of the more expensive suit means it is good for 500 wearings; the cheaper suit is only good for 200.

The suit's purpose is to make its wearer look as good as possible as often as possible. The higher quality of the \$400 suit guarantees he will look better. He will also look better at a cost of \$.80 per wearing; the cheaper suits costs \$1.00 per wearing. Which is the better value now?

There are parts of your life that shouldn't have assigned values. Relationships and experiences come to mind. For things we negotiate in the marketplace, determining value requires looking at quality, expected utility, and yes, price. Value is determined where these three intersect.

In the long run, it's better to pay a fair price for something good than to pay a good price for something fair. And in the long run, the cheapest is usually the most expensive.



THE COSTS

It may have happened to you already. If it hasn't happened to you yet, there's still a chance it will. If you're smart and a little lucky, it won't happen to you more than once.

"It" is a bad relationship. You invest a lot of time and effort in it. Despite your efforts, you reach a point where you doubt the relationship will ever become what you hoped it would. You begin to consider your options.

You consider all the time invested in your current relationship. If you end it, all that time and effort will seem wasted. You wonder if more time invested can salvage the relationship.

You consider the possibility of other relationships. You know that other relationships are possible and that some of them would have to be better than your current one. But that's all you know.

"In for a penny, in for a pound" is an old English saying with more than one meaning. It originally meant if you owed a penny (pence), you might as well owe a pound; the penalties for non-payment of either were about the same. The more common meaning is once you start something, you should finish it, regardless of cost. It's known as perseverance, a trait we admire. But it's worth remembering that **perseverance in a good cause is stubbornness in a bad one.**

Stubbornness is the usual result when you succumb to *sunk-cost fallacy*. A sunk cost is a cost that has already been incurred and can't be recovered; it's a fallacy to think it can be. Sunk costs are in the past; they should have no impact on future plans. But they do, and to an alarming extent.

It is unlikely that investing more time will turn a bad relationship into a good one. The time already invested is a sunk cost – it will never be recovered no matter how much additional time is invested. It's called a *sunk* cost for a reason.

There's another saying – Don't throw good money after bad. Even the best and brightest do it, though.

Max Bazerman, a professor at the Harvard Business School, created a unique auction. His students could bid on a \$20 bill. Normally, such an auction would end when the bid reached \$20. Dr. Bazerman added a twist. While the winner got the \$20, the runner-up was also required to honor his/her bid. If the winning bid was \$20 and the second highest bid was \$19, that bidder had to pay \$19, while receiving nothing.

Inevitably, the bidding went past \$20; neither bidder wanted the sure loss. Every bid was a sunk cost for the bidders. This mindset pushed the bidding to where both parties suffered big losses. This auction has been conducted over 200 times. The lowest winning bid was \$39; the highest was \$437. The best and brightest at Harvard succumbed to sunk-cost fallacy. They threw astonishing amounts of good money after bad.

If you've held on to a money-losing investment too long, you've succumbed to sunk-cost fallacy. The sunk cost feels like an anchor around your neck. You delude yourself about the investment's prospects. You sink additional money into it, hoping to turn it around. You would've been better off selling at a loss and moving the money into something more productive.

Every choice we make comes with an *opportunity* cost. For everything we choose, there is something we don't choose. The choice we don't make is the opportunity cost.

If you continued in a bad relationship, the opportunity cost would be all the relationships you could have instead. Even if you weren't considering another relationship, the opportunity cost could also be the peace of mind of not being in a bad relationship.

There is an opportunity cost in money associated with each possession. Your financial resources are limited. For everything you own, you forego the opportunity to own something else.

You also pay an opportunity cost in time for each possession. You spend time earning money to buy, protect, and maintain a possession. You also spend time using that possession. For everything you do, you forego the opportunity to do something else.

Impulsive people are likely to ignore opportunity costs. When there is something they want to own or do, they act impulsively without considering all the costs. **Patient, contemplative people consider opportunity costs and have fewer regrets about their decisions.**

Patient, contemplative people also suffer less from sunk-cost fallacy. By investing time and research into something before investing money, these people have fewer delusions about their investment. Their investment is less likely to disappoint them. If it does, they can be objective enough to recognize the money is sunk and there's no point in throwing good money after bad.

Sunk costs are about the past. If a sunk cost turns out to be a mistake, leave it in the past. Don't compound the mistake by dragging it into the present. Don't throw good money after bad.

Opportunity costs are about the future. Carefully consider the opportunity costs before any investment of time and money. You don't want to spend the future lamenting missed opportunities of the past.

FUTURE VALUE

THE SUM IS ZERO

Warren Buffett probably knows more about investing than anyone ever. His ranking as one of the world's richest people testifies to his skill. He also knows the difference between investing and gambling. In a speech to MBA students, Buffett recalled an early lesson: "On my honeymoon I traveled out West. When I visited the casino and saw all these smart, well-dressed people participating in a game with the odds against them, it was then I realized I won't have a problem getting rich!"

Over the 2,500-year history of money, one of humanity's biggest errors is mistaking gambling for investing, and vice versa.

Misunderstanding the difference between gambling and investing is a two-edged sword. Mistaking gambling for investing leads to greater risks and greater losses. Mistaking investing for gambling leads to fewer risks and fewer gains.

Most people understand the concept of gambling if they've ever placed a bet. Whether the gambling occurs at a Friday night poker game or a Super Bowl bet, such bets have one thing in common – they're *zero-sum games*.

Zero-sum games create no wealth; they merely transfer wealth from one person to another. When six friends get together for an evening of poker, some will leave richer and some will leave poorer, but the total amount of money among them won't change.

In a zero-sum game like friendly poker among friends, the total odds for the group are even. If one player's odds of winning are 2 to 1, some other player or

players' odds of winning are 1 to 2. Every cent of gain for one involves a cent of loss for another.

In a zero-sum game, you can tip the odds in your favor if you're better at the game than your opponents. However, it's hard for most people to accurately judge their skill level. Most people overestimate it, leading to losses.

Most zero-sum games are games of chance, not skill. It's only a game of skill if *your* skill affects the outcome. When two football teams play, it's a game of skill for the players only. For everyone else, they're betting on a zero-sum game of chance - a sucker bet because they have no control over the outcome.

With both investing and betting, you can gain or lose, but the similarity ends there. With betting, someone *has* to lose. There may also be many more losers than winners, lotteries being one example. With investing, no one *has* to lose because investing isn't a zero-sum game.

Investing is putting money to work with the opportunity to make more. The key difference between gambling money and investment money is investment money works while gambling money doesn't. That difference enables every potential investment to be a winner.

When people like Henry Ford and Bill Gates created multi-billion-dollar enterprises, those billions weren't transferred; they were created by creating products that benefitted billions of people over many decades. Such enterprises show **investing is designed to be win-win. Gambling is designed to be win-lose.**

Another difference between gambling and investing is addiction. For compulsive gamblers, winning at gambling activates the brain like cocaine does for cocaine addicts. Gambling gives the gambler a rush. If an investor gets a rush from investing, what passes for investing might actually be gambling.

Success in investing requires nothing more than fair amounts of skill and patience. You can increase your levels of skill and patience to become a better investor. Success in betting requires huge amounts of luck. By definition, luck is not something you can control. Luck also evens out over time. A winning streak today will be followed by a losing streak tomorrow. Very few gamblers have the discipline to quit in the middle of a winning streak. Fewer still have the discipline to quit during a losing streak, until they're wiped out.

There's nothing wrong in trying to be as efficient as possible in building wealth. There is also no escaping the correlation between risk and reward. Investing can mutate into gambling when it's done for similar reasons - the desire for quick riches and the thrill of making it happen.

Gambling creates risk where none existed before. With a zero-sum game, the floor of risk and the ceiling of reward are the same. In contrast, investing does not create risk; it spreads risk among those seeking the rewards of investing. Investment risk is also reduced by diversifying – not putting all your eggs in one basket.

There's one other very important difference between gambling and investing. There is an upper limit to how much reward you can get from a bet. Even if you're lucky enough to win a \$1 bet with 100 to 1 odds, you'll only receive \$100. If you're patient, there is no upper limit on how large a \$1 investment can grow.

A \$1 investment fifty years ago in Warren Buffett's Berkshire Hathaway Company would be worth over \$10,000 today. In order to have a similar gain from

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gambling, you would need to win 100 consecutive \$1 bets, each with 100 to 1 odds against you. To put that in perspective, the odds of winning all 100 bets are:

That number is a 1 followed by 200 zeroes. If you want to name it, say "one-hundred" and then "billion" twentytwo times. If you try generating it in a calculator, it reads "Error", a perfect summary of gambling on zero-sum games.

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000		\$7	1 in 360.14
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THE RESERVOIR

In 1930, the population of Las Vegas, Nevada was 5,000; today it is 2 million. In 1930, the population of Phoenix, Arizona was less than 50,000; today it is 4.5 million.

Many factors enabled these desert cities to grow over a hundred-fold in under a hundred years. No factor determines a city's size more than a reliable water supply. No factor determines a reliable water supply more than a reservoir.

The Colorado River is the closest major water source to Las Vegas and Phoenix. In 1930, the river was wild, its flow uncontrolled and unpredictable. In the 1930s, Hoover Dam was built on the Colorado. The dam created Lake Mead, the largest U.S. reservoir by water volume. Lake Mead can hold two years' river flow. It took five years to fill.

Hoover Dam provided electricity for Las Vegas and Phoenix to grow. But Lake Mead provided essential water to enable millions to live in a desert. The reservoir insured survival first and growth opportunities second.

Your money moves like the waters of the Colorado. Most of the time, its flow is adequate, predictable and manageable. Occasionally, there is high volume. More often, there is low volume. The periods of low volume are the problem.

Everyone needs a money reservoir. A money reservoir can be used for emergencies and more. But before a money reservoir can be used, it has to be built.

Lake Mead was filled by retaining part of the river's flow. The amount retained had to balance the needs of those downstream with the need to fill the reservoir in a reasonable amount of time. Above-average flows could shorten the time to fill, but they couldn't be assumed in the planning.

In building a money reservoir, you would take the same approach. **Unexpected inflows of money should be sent directly to the reservoir.** Such inflows may not occur at all, and they can't be counted on to meet your goals. They're merely a pleasant surprise and a chance to reach your goal ahead of schedule. A bonus from work, an inheritance, or a lucky weekend in Las Vegas are examples of unexpected inflows. When money falls into your lap, pour it into your money reservoir.

Most of your money reservoir would be filled with money diverted from other uses. Filling your money reservoir would mean spending less during the time the reservoir is filling. You would have to make adjustments to outflows. Some discretionary spending would have to be curtailed. It doesn't have to be permanent, though. Once you reached your goal for your money reservoir, you wouldn't need to continue diverting funds to it. However, if you established the habit, it's a good one to maintain. You don't know how much you'll need from your reservoir in hard times.

How big should your money reservoir be? For starters, it can't be too big. Lake Mead's size is limited by the height of Hoover Dam. Your money reservoir has no such limitations. As long as you're meeting your financial obligations and you have money you can add to your reservoir, keep adding to it.

If you're a single-income household, a good goal for your money reservoir is six months of living expenses. If the only wage earner becomes unemployed, six months of living expenses in the reservoir should be enough until a new job can be found. A two-income household runs a smaller risk of having no income. For that reason, three months of living expenses is a good goal for the reservoir. If one income is substantially larger, a larger reserve may be needed. The goal should be to have enough in the reservoir to cover the expenses paid for by the higher income for six months.

Saving six months of living expenses is no small task. It would require setting aside ten percent of income for five years for a single household; two to three years for a two-income household. The burden could be made easier by designating all pay raises and all money from nonwork to go into the reservoir.

The benefits of a money reservoir are worth the sacrifice to build it. **The reservoir creates security against the unexpected.** The unexpected might be a job loss, a medical emergency, or an uninsured loss. Borrowing to deal with the unexpected might be expensive and might not even be possible. An unexpected loss and no money reservoir might require selling assets at fire-sale prices to raise cash.

A money reservoir also enables you to seize opportunities. Whether it's a business venture or an asset at a great deal, some opportunities are only available to those with ready cash.

Even if a money reservoir is never needed, it pays for itself by providing peace of mind. Knowing a potential disaster doesn't also have to become a financial disaster makes it easier to handle whatever comes along.

Your money reservoir probably won't benefit you as much as Lake Mead did for Las Vegas and Phoenix. It doesn't have to. Your money reservoir will provide you with security and opportunity, which is all we should expect money to do.

THE PRICE OF PROCRASTINATION

Jean and Sue were best friends in high school. When they graduated in 1953, they both landed typist jobs at the same company. Part of their new employee orientation was a presentation by a mutual fund salesman. He talked about the advantages of investing early and regularly. Jean decided to invest \$600 per year into an S&P 500 mutual fund, a collection of 500 stocks of the biggest American corporations. Sue decided to wait. She preferred to use her earnings to enjoy herself and make herself appealing to eligible young bachelors at her company.

A decade went by. Jean got married and left work to start a family. She stopped regular investing, but left her money in the mutual fund. By this time, Sue was pushing thirty and realized she needed to start investing. She feared she might be working another thirty-five years - she hadn't yet snagged a husband. Sue followed Jean's lead and started investing \$600 per year in the S&P 500 mutual fund. Sue did this faithfully for the next thirty-five years.

Neither woman ever took any money out of her investment. Jean and Sue had remained friends over the years. One day they were having lunch and talking about the upcoming forty-five-year high school reunion. The topic drifted to their first jobs after high school and to their choices - Jean's to invest now and Sue's to invest later. They decided to compare notes on how their investments had done.

Sue went first. She had invested \$600 per year every year for the last thirty-five years. Her investment had grown to an impressive \$458,446*. Then it was Jean's

turn. She had started forty-five years ago, invested \$600 per year for ten years, and then stopped when she got married. Her investment had grown to an even more impressive \$726,828*.

Sue was shocked. "How could you have more money than me? I invested for thirty-five years and you only invested for ten!" Jean didn't have a technical answer. All she could say was, "I guess my ten-year head start was too hard to overcome." She could have said a tenyear delay is also hard to overcome, but Sue already realized that.

Imagine your goals are a prize that awaits you at the top of a long set of steps. You have to climb the steps, but you have a limited amount of time because water will soon begin flooding the area. Some people look at the steps; they decide they'll never make it to the top in the given time, so they don't even try. These people refuse to acknowledge the coming flood. To do nothing is to be doomed, so any progress is better than none.

Some people get climbing right away. They know the sooner they get started, the sooner they will get to the top. Even if they don't get to the top, they'll still be above the flood waters. Consistent effort over time beats a desperate rush against time.

Which brings us to the last group. They don't start climbing until the water does. Then there's a desperate scramble up the steps. Their haste usually leads to falls and injuries that slow them down to where they drown. Such is the price of procrastination.

FUTURE VALUE



The heights of great men reached and kept Were not attained by sudden flight, But they, while their companions slept, Were toiling upward in the night.

-Henry Wadsworth Longfellow

*These are actual results for these periods of time. See chart at back of the book for the hard numbers.

BULLYING WITH BUCKS

He ranks sixth on the American Film Institute's list of greatest movie villains. He trails only Hannibal Lector, Norman Bates, Darth Vader, the Wicked Witch of the West, and Nurse Ratched. He ranks sixth despite being frail and old and confined to a wheelchair. He ranks sixth despite being a law-abiding citizen and a pillar of his community.

Our villain-in-question is Mr. Potter, from the Christmas classic *It's a Wonderful Life*. Mr. Potter's biggest fault is his uncontrolled greed. His greed made him the richest man in Bedford Falls. Yet, it isn't Potter's wealth or even his greed that makes him a classic villain. He ranks right up there with certifiable psychos because he used his wealth to bully an entire town into doing his will.

In recent years, bullying has received so much attention there is a government website to learn about and respond to bullying (www.stopbullying.gov). It states bullying behavior is typically aggressive, exploits an imbalance of power, and is repeated.

Adolescent bullying behavior usually disappears by adulthood. People usually grow up. Even if some adults wanted to behave like middle-school bullies, there's a higher price to be paid in adulthood.

Inequalities trigger bullying. In school, physical strength and popularity are the big inequalities. The quarterback is never bullied, but may be a bully. The scrawny introvert is rarely the bully, but is often bullied. These inequalities fade in adulthood and can even reverse. **In adulthood, brains rule over brawn, and** **"popular" doesn't exist.** The quarterback may end up working for the scrawny introvert.

Adolescent bullying may fade in adulthood, but bullying behavior may not. Adults, like children, like to dominate – we just have different and, in many cases, more effective ways to dominate.

In elementary school, physical differences lead to a pecking order - big kids bully small ones. In middle and high school, social status is the big prize. Those who have it lord it over those who don't. What adults want more than physical or social dominance is *money*.

Adults gauge their position in the world through money more than anything else. Adults know physical strength and beauty fade. Adults know social status from a job can disappear if the job does. Yet, even if you're old and frail and ugly, even if you don't have a job and you're not well-liked; if you have enough money, you can exert influence and bully others. Just ask Mr. Potter.

There are countless ways to bully with money. An employer might require more output from employees, threatening wage and job cuts if they don't respond. A politician might withhold a contract unless an endorsement is given. A donor might demand a building be named after him in exchange for a donation.

Often, when people use money to compel others, they're bullying; often, but not always. Withholding a child's allowance until chores are done is not bullying with money. Offering workers a bonus for higher productivity is not bullying with money. **Bullying with money compels people to do something that's not in their best interests,** and that's often because the action is wrong.

Financial bullying occurs in marriages. If one partner dominates another through money, they're bullying with

money. It may show up as a guilt trip over purchases, by controlling all credit cards and bank accounts, by limiting spending, or by belittling a partner's income.

One in ten couples claims a partner bullies with money, but it's double for couples under thirty-five. Many more men than women in this age group feel bullied. This imbalance may result from young women's increasing earning power and their demand for more control over their money.

Very few kids who are bullied in school ask for it. Adults living in poverty are like the smallest kids in the class. They're at the mercy of those with more, whether it's money or muscle. Adults, who through no fault of their own have little money, are easy targets for money bullies.

Some adults are innocent victims of money bullies, but some adults invite bullying by their own money weaknesses. They ask for it.

If you admire someone for their wealth alone, you set yourself up to be bullied with money. You judge them by how much money they have. How little character they may have doesn't matter. As long as they have money, you're a fan, and they can treat you as they wish. Your admiration of money alone also says something about *your* lack of character. If you admire someone for their wealth alone, you deserve the shabby treatment you'll get.

If you find yourself being bullied with money, you may have no one to blame but yourself. Going deep into debt, especially over vices like gambling, puts you in the position of slave to a master – the master being the one with money. Spending foolishly to maintain a highstatus lifestyle is also an invitation to money bullies.
FUTURE VALUE

The more self-control you have over money, the less control you cede to others, especially money bullies.

In *It's a Wonderful Life*, George Bailey was the one person Mr. Potter couldn't bully with money. George wouldn't sell his integrity just to make more money working for Potter. George wouldn't let Potter's wealth blind him to the man's motives. And when Potter went all-out to ruin George, Potter's bullying with bucks proved no match for George's faith, family, and friends.



MEDIA, MOBS, AND MONEY

If you were asked to define *media*, you might give examples such as magazines, television, and the internet. *Media* is defined as "an intervening substance or agency through which something is transmitted, accomplished, conveyed, or transferred."

Media often has negative connotations, but media itself is not a problem; the content on media can be a problem. It's a software issue, not a hardware issue.

The term *Financial Pornography* was first coined in 1995. It referred to stories with titles such as "Top Ten Stocks to Own NOW!", "How to Double Your Money in a Year!", or "How to Retire Rich at 45!"

Financial pornography appeals to emotion. Emotion is dangerous to your financial health. **The media, including financial media, exploit the emotions of greed and fear.** They exploit whichever emotion dominates at that moment. That exploitation further increases the public's level of that emotion. Financial pornography is one of the reasons the stock market is more volatile and unpredictable than ever.

Financial pornography doesn't want to help you; it wants to sell to you. All media is a business; it's not a public service. They exist to serve their interests, not yours. When it comes to financial advice from mass media, you may think you are being informed when you are really being manipulated. Be skeptical.

Social media has been called word of mouth on digital steroids and the world's largest referral program. Social media has become the place for a business to be if they intend to stay in business. While it may be called social media, it is actually driven by market norms. The real reason for the popularity of social media isn't the desire to keep up with friends; it's the almost endless opportunities for self-promotion.

Many people believe when you've got it, flaunt it. Social media is the perfect place to flaunt it. Social media doesn't have the self-imposed filters people use when face-to-face. **Social media is also an effective tool for peer pressure.** That peer pressure can include pressure to spend money you don't have for things you don't need.

Charles Revson, the founder of Revlon said, "In the factory we make cosmetics; in the store we sell hope." Revson understood that making a good product was no guarantee of success in the marketplace. Products need to be marketed as well as manufactured.

Manufacturing creates products. Advertising creates *desire* for products.

Advertising emerged in the twentieth century because of several factors. An industrial economy enabled more people to have disposable income. New media enabled advertising to reach more people. Finally, more people were concentrated in cities, making advertising more cost-effective by reaching larger numbers.

Reliable estimates say Americans are exposed to 500 to 1,000 advertising exposures per day – including TV commercials, billboards, print ads, internet ads, and logos on products from cereal to sandals. Studies have shown that the average American eight-year-old has a vocabulary of 4,000 words, of which 400 are brand names.

Constant advertising bombardment has two effects. Because of their sheer number, few messages have any impact. We become deaf to most of it. But there is a cumulative effect. Constant bombardment wears us down. Even if only 1% of the messages get through, that's 5 to 10 a day, every day.

As part of creating desire for a product, advertising attempts to make you feel dissatisfied with your present product. Most people are happy with a product until it is no longer state-of-the-art. **One way to get people to spend money is to make them believe they're regressing.**

While you may resist advertising's lure, your neighbors may not. If those around you are being seduced by advertising, you could become collateral damage. Seeing your neighbor's new car next to your old clunker every day might become too much to bear.

Consumer spending now accounts for two-thirds of our economy. Advertising drives a lot of consumer spending. Unfortunately, a lot of consumer spending is financed with debt for things that people merely want but don't need. Corporations borrow money for items that will make them richer. Consumers borrow money for items that will make them poorer.

Media, and the advertisers that finance it, see the public as a herd to be led. They see the public as a herd because they often act like a herd. When things are going well, people act like a herd. When things go bad, they act like a mob.

Part of this herd/mob mentality is instinctual. We are social animals; we want the acceptance of others. Many fear that taking a differing position will cause the group to doubt their intelligence, competence, or taste.

When submitting to a herd/mob mentality, it is easy to justify submission by deferring to the "collective wisdom" of the group. But collective wisdom is a myth.

Wisdom is created through personal experience. Unlike knowledge, wisdom cannot be effectively transmitted from one person to another. Knowledge can be accumulated over time, and it can be shared over time and among people; wisdom can do neither. To illustrate, while we have increased our ability to make weapons (cumulative/collective knowledge), we have not increased our ability to prevent war (wisdom).

In groups, people are more easily agitated. Every sentiment and act is more contagious and more likely to trigger action. A group regresses to its lowest common denominator, turning into a herd or a mob.

Stupidity proliferates faster than wisdom, especially in groups. The ability to quickly move money with a mouse click or a screen tap increases the danger that people will follow a herd/mob mentality and do really stupid things with their money.

There is one group in America that seems immune to media manipulation, including manipulation via social media. This group isn't manipulated by advertising to spend foolishly, either. They have no interest in competing with or comparing themselves to their neighbors through status symbols. This group seems impervious to media or mobs. This group is America's wealthy.

The wealthy believe that financial independence is more important than displaying social status. Their disinterest in status symbols liberates them from the influence of advertising and peer pressure. The wealthy have their own agenda, and they recognize that the media has a much different one. Finally, the wealthy know that a herd or a mob has many heads, but few brains.

THE MARCH TO AVERAGE

If there's one field where people are more statisticscrazy than finance, it's baseball. Major-league baseball has been around since 1876. There have been over 210,000 games played in its first 140 years. At least 2,400 games are played each year. Along with a rich history, major-league baseball has a huge database.

Despite a long and diverse history, here are some baseball stats that are predictable year after year:

- The best team will win around 100 games.
- The worst team will lose around 100 games.
- The best pitcher will win 20 to 24 games.
- The best hitter will have a .310 to .340 batting average.
- Your team won't win the World Series.

Because the baseball regular season has so many games (162 vs. 82 in basketball and hockey; 16 in football) statistics are more predictable. As population size and time increase, the numbers move closer to their long-term averages. The technical terms for these moves are *progression/regression to the mean*.

The S&P 500 is the most-used measurement of the U.S. stock market. It has been around five years longer than major-league baseball. Its best year ever was 1933, when it gained 56.8%. Its worst year was 1931, when it lost 44.2%. Both are big swings, but the biggest gain came just two years after the biggest loss. Also, these years were during the Great Depression, when nothing in the financial world was normal.

The stock market can move a lot from year to year. It can even climb or fall for several years in a row. However, if you look at the S&P 500 over longer periods, such as 10 years, patterns become more predictable.

While the best one-year return for the S&P 500 was over 56%, its best ten-year average return was 21%. The worst one-year return was over minus-44%, but the worst ten-year average return was minus-5%. Just as in baseball, the longer the season, the more the results move toward their long-term averages. Hot and cold streaks blend together over time, and you end up with warm, cool, or tepid.

Whenever something is running hot or cold, whether it's our favorite team or our investment portfolio, it feels like it will continue forever. We take the recent past and extend it to infinity. It's why a team gives a player a ten-year contract after one good year. It's also why they fire the manager after a ten-game losing streak. It's why individuals buy stocks when they've been soaring, despite high prices. It's also why they sell those same stocks at low prices when they've been sinking.

Streaks, hot or cold, hijack emotions. When our investments soar, we get greedy and want more. When they sink, we get fearful and sell at any price. We forget that our investments and our favorite team will regress or progress toward average, given time.

Understanding progression/regression to the mean may be consoling, but a long-term average can also mask a lot of short-term volatility. In 1987, the S&P 500 had a return of 5.7%. While that number would imply an average year, on one day alone, October 19th, the S&P 500 dropped by more than 20%! That year for investors was like standing in the kitchen with one hand on a hot stove and the other in the freezer. *On average*, the temperature is fine, but the extremes are a little hard to take. If your investments are diversified and if you understand progression/regression to the mean, you'll be less likely to let your emotions hijack you when the bulls and bears run amok on Wall Street. If you control your emotions and set realistic goals, the march to average will be good enough to get you there.



Distribution of monthly returns for the S&P 500

In prosperity, caution; in adversity, patience.

Dutch proverb

LET IT GROW

Most of us have heard the story of Peter Minuit and the Dutch purchasing Manhattan Island in 1626 for \$24 worth of beads and trinkets. The story is told mostly to point out what a shrewd deal the Dutch made at the expense of the natives.

The shrewdness of this deal depends on your perspective. If you look at Manhattan in all its 21st century glory, Peter Minuit was a visionary genius. But the genius of the deal depends on several variables.

One variable is how much was actually paid for Manhattan in 1626. Payment was made in merchandise valued at 60 guilders, the Dutch coin. Guilders were made of silver, and 60 guilders weighed about 18 troy ounces (the measure for silver). At this writing, silver is worth about \$15 per troy ounce, making the purchase price of Manhattan in 1626 closer to \$270.

Another variable is Manhattan's worth today. At this writing, Manhattan real estate is valued at about \$1,200 per square foot (really). Manhattan is 33.77 square miles or 941,453,568 square feet in size. At \$1,200 per square foot, the land of Manhattan is worth about \$1.13 trillion.

The final variable is the interest rate it would take to turn \$270 into \$1.13 trillion in 390 years (1626 to 2016). It would seem impossible to generate a high enough interest rate to turn *each dollar* into almost \$4.2 billion in that period of time. The annual interest rate needed to turn \$270 into \$1.13 trillion in 390 years is - are you ready? - 5.85%. That's right - just 5.85%. Rounded to the nearest hundredth of a percent, that interest rate also leaves a surplus of \$20.5 billion, enough to buy eight Empire State Buildings.

An interest rate of 5.85%, compounding for 390 years, turns \$1 into more than \$4.2 billion or \$270 into \$1.13 trillion. It may seem impossible, but it's really just math. (see appendix)

The trick to turning so little into so much is compounding. *Compounding* means you let the interest payments stay with the rest of the money and continue to earn interest, too. Over time, the amount of accumulated interest gets so big it dwarfs the original investment. Interest being left to earn more interest – that's all compounding is. The higher the interest rate and the longer the time, the bigger the pile of money becomes.

What if the original \$270 in 1626 earned 5.85% annual interest, but the interest was taken out each year? How much would the interest payments amount to? An interest payment of 5.85% on \$270 comes to \$15.80 per year. Multiply \$15.80 by 390 years and you get \$6,162.

Which would you rather have – interest payments totaling 6,162, or a net worth of 1,130,000,000,000? Those numbers are the difference between taking the interest as income or leaving it to grow.

Since you won't live 390 years, you won't be able to turn \$1 into \$4.2 billion. But you're likely to live at least sixty years between your first paycheck and your last breath. One dollar invested for sixty years growing at an 8% compounded rate would become \$101.26. One dollar became one-hundred more, but the original dollar bred less than five more dollars. The other ninety-five were bred by compound interest dollars that were reinvested to keep growing.

Both time and interest rates determine how much your money will grow. The dollar that was invested for sixty years grew more in the last ten than it did in the first fifty. If the interest rate had been only 6% instead of 8%, the total after sixty years would have been only \$32.99 instead of \$101.26. It would take twenty more years at 6% interest to get to \$100.

If your only path to wealth is through work, you won't get there. If your path is through your money working, you have a much better chance. **The best way to put your money to work is find a productive place for it and then leave it to do its thing.**

Money doesn't grow on trees, but it grows like a tree. Finding a good place for it to grow is the first step. It will seem to grow slowly at first, but as it gets bigger, it adds size rapidly. It will also grow best when it isn't disturbed. And if you let it grow, it will eventually produce fruit even while the tree keeps growing.



"Compound interest is the eighth wonder of the world. He who understands it, earns it; he who doesn't, pays it."

-Albert Einstein

BLOWING UP YOUR MONEY

Imagine you buy a loaf of bread every two days at the corner bakery. The first day the bread costs \$1. Two days later, it costs \$2. Two days after that, it costs \$4. The price doubles every two days. A loaf of bread that cost \$1 at the beginning of the month costs almost \$33,000 by the end of the month. Seems impossible, doesn't it?

This exact situation occurred in Germany in 1923. After losing World War I, Germany was forced to pay huge reparations to France and Great Britain. The German government began printing huge amounts of marks, the German currency, to meet all its obligations. All that money chasing a limited amount of things to buy sent prices soaring. In January 1923, a 5 million mark note was worth \$714.29. By October of that year, it was worth 1/1,000th of a cent.

What do people do when their money becomes worthless? For starters, they stop using it. They use more stable foreign currencies instead. They revert to a barter system. They also look for radical change in the government they blame for the problem. In the case of Germany, they eventually turned to the Nazi party and Adolf Hitler for a solution.

Inflation is the term for money losing value over time. You recognize inflation through rising prices. Germany in 1923 was a classic case of *hyper*inflation. The United States has never experienced anything so bad, though inflation frequently follows wars. Win or lose, wars cost a lot, and governments create more money to pay for wars. Why would a government create more money if it will create more inflation? Many national governments, like the federal government of the United States, can create their own money. These governments also spend money – lots of it. Governments can pay for their spending in one of three ways. They can raise taxes, which is never popular. They can borrow, but that money has to be repaid with interest. They can also create new money, sometimes by printing it, but more frequently by creating it electronically. Creating money enables a government to spend freely now, but the cost is often paid later in the form of inflation.

Inflation is just another example of supply and demand at work. If everyone in your town suddenly saw their incomes double, you could expect prices of everything in your town to rise quickly, too. If more money is chasing the same number of goods and services, the bidding for them will push prices higher.

Prices can move in the other direction too, though it's rarer. During the Great Depression of the 1930's, the U.S. had *deflation*, where prices dropped. Millions were out of work, so there was little money in circulation and prices fell. Deflation may sound good (prices falling), but if people think something will be cheaper in the future, they won't buy today. If no one is spending, the economy grinds to a halt. In contrast, modest inflation can stimulate the economy because people know it's cheaper to buy something now than to wait.

If inflation is modest (under 5% per year) you won't pay much attention. But even modest inflation can hurt you financially over time.

If you got a 3% pay raise every year, but inflation averaged 3% every year too, in twenty years you would have made no progress. You would be making more money, but everything rose in price by the same amount. If your investments grew 3% per year during that time, you would have made no progress there, either. We work for pay raises and invest instead of spend with the hope that we will be able to buy more in the future. If inflation eats up your pay raises and your investment gains, it's like walking up the down escalator.

During your working years, pay raises can keep the effects of inflation from hurting you. Cost of living increases in wages are one way to reduce the effects of inflation. It's why these kinds of increases exist. As you progress in your career, promotions and the raises that go with them should keep you ahead of inflation. It's the years after you stop working that can be difficult.

Inflation, at various levels, goes on throughout your working life. Because of inflation, the amount you thought would be enough to live on in retirement may turn out to be far too little. For example, right now you may figure that \$50,000 per year would be enough to live on when you retire. But that estimate is based on today's prices. If retirement is thirty years away, and if inflation averages just 3% per year between now and then, you won't need \$50,000 per year in retirement; you'll need over \$120,000. With 3% inflation per year over thirty years, what costs \$50 today will cost \$121 then. You have to invest enough to allow for inflation. You also have to invest aggressively enough to outpace inflation. If you don't, you may have far less to live on in retirement than you planned.

Inflation won't stop when you retire, either. Many retirees don't calculate for inflation in retirement, and many don't have incomes that can increase. If you were to live twenty years in retirement, and inflation averaged 3% per year during that time, what cost \$1.00 at the beginning of your retirement would cost \$1.80 at the end. On a fixed income, that would mean buying about half as much at the end of retirement as at the beginning.

When you listen to old people talk about the "good old days", one of their favorite topics is how much cheaper things were back then. In 1960, you could buy a new car for \$2,000, a house for \$10,000, and a year's tuition at a state university for \$500. The price differences between then and today are the result of inflation over that time. Old people may think prices are high today, but one day you'll look back at today's prices and remember them fondly for being so low. The cycle of inflation also breeds a cycle of nostalgia.

Even though there's almost nothing you can do to affect the rate of inflation, the worst thing you can do about inflation is ignore it. Your long-term financial plans should allow for inflation and resulting higher prices. You may not enjoy paying \$30 for a hamburger when you're eighty, but it would be nice to know you can.



FUTURE VALUE

BALANCING ACT

If you want to know how you're doing financially, two statements will tell you. One is the *income statement* (more on that later). The other is the *balance sheet*. Your income statement shows how you did over a certain period. It's like the box score for a ball game. Your balance sheet shows how you stand at a certain point in time. It's like the league standings.

The balance sheet has two sides. One side lists *Assets*. Assets are anything you own that has value. For a business, it could be factories, offices, equipment, even their brand name. For an individual, it could be a home, cars, cash, retirement accounts, even a collection of vintage Star Wars action figures. If you own it and it has value, it goes on the asset side of your balance sheet. By now you realize **assets are good**.

The other side of the balance sheet lists *Liabilities*. Any duty to pay someone is a liability. Most liabilities are debts. Debts for an individual include mortgages, car loans, student loans, and credit cards. In addition to your own debts, if you co-signed a loan for someone, that's a liability. If you owe back taxes, that's a liability. If you injured someone in a car accident and didn't have insurance, that's a liability. By now you realize **liabilities are bad**, or at least too many of them are bad.

In businesses, the difference between the value of assets and liabilities is *Stockholder's Equity*. It's listed on the liabilities side of the balance sheet to get the balance sheet to balance. For you, the difference between the value of your assets and liabilities is *Net Worth*. If you want to be a millionaire, your net worth

must be at least a million dollars; you need at least a million dollars more in assets than liabilities.

When we think about wealth, we usually think about income. Income is usually the main ingredient in creating wealth, but income alone doesn't create wealth. The income statement only tells you how you're using that main ingredient. The balance sheet tells you if you're actually wealthy. Income is what you make; wealth is what you keep. No matter how big your income, you won't become wealthy if you spend it all. It isn't what you make, it's what you keep that matters.

To increase wealth, you can increase the assets and/or reduce the liabilities. It takes time to increase assets or reduce liabilities. It doesn't take long to reduce assets or increase liabilities, though. Most people aren't wealthy because they forget that fact.

Think of your assets like a sponge, soft and squishy. The value of your assets can change, like the size and weight of a sponge. A stock portfolio, a house, a car, Star Wars figures - their values change all the time. And it's others, the buyers, who decide what your assets are worth. You try to own assets that will go up in value. You hope their value grows like a sponge filling with water; not shrink like a sponge getting wrung out.

Think of your liabilities like granite, hard and unbreakable. Almost all liabilities are created by contracts or laws. When you borrow money, you sign a contract written by the lender. It was designed to protect them, not you. There is only one way to reduce the liability – pay them back as promised in the contract. If a liability was created by a court decision, like child support, you can face jail if you don't pay. The only way to reduce liabilities is to chisel away at that granite until it's gone. Sometimes the values of assets rise quickly, like real estate in the early 2000's, or the stock market every few years. When that happens, it's tempting to take on new liabilities. You can borrow money, buy some luxuries, or take a vacation, and your balance sheet will still be OK. The problem is the asset values eventually shrink while the liabilities do not (sponges and granite).

If the liability side of your balance sheet became so large that your assets and income couldn't cover them, you might seek relief through *Bankruptcy*. Bankruptcy gives you a chance to get out from under that pile of granite, but at a price.

There are different types of bankruptcy. Under Chapter 7 bankruptcy, most of your debts would be cancelled; most, but not all. No bankruptcy gets rid of student loans, alimony, or child support. In exchange for debt relief, you may have to sell your "luxuries". You won't have credit cards, and you may not be able to get a loan for up to ten years.

Chapter 13 bankruptcy is less drastic than Chapter 7. Chapter 7 cancels most debts, but you have to qualify. Chapter 13 sets up a debt repayment schedule everyone can live with. If you have a steady income and the debts are under a certain amount, Chapter 13 is the lesser of two evils.

Bankruptcy is an act of desperation. It requires longterm pain for short-term gain. Trading long-term pain for short-term gain is always tempting if you're a short-term thinker. Unfortunately, the long-term arrives too soon and stays too long, long after the short-term gain is just a memory.

IN AND OUT

Are you someone who runs short of money between paychecks? Are you someone who can't explain where large chunks of income went? Do you feel like there's a leak in your checking account? If so, help is on the way.

You learned about balance sheets in the previous lesson. Your other important financial statement is the *income statement*. In a business, the income statement and balance sheet are two of the most important among many financial statements. For personal finance, a balance sheet and an income statement that includes cash flow information are sufficient.

The balance sheet shows your assets, liabilities, and net worth at a particular point in time. The income statement shows the sources and uses of money over a certain period of time. Cash flow deals with the timing of money going in and out.

An income statement can be for an individual or a household. If income is pooled and expenses are shared, a household income statement makes more sense.

For most, the income side of an income statement is simple. There are probably one or two incomes from jobs. There may be additional income from investments, but for most households, the income side of the statement is brief. Gross income before taxes can be listed on the income statement, but the figure you will compare against household expenses is the *net income*, the amount that comes home.

Since most of your expenses are paid monthly, a monthly income statement is the shortest period to cover. Personal balance sheets only need to be generated at year-end. You would also want to generate an annual income statement at year-end.

An income statement covering the period between balance sheets can show how your management of income and expenses created changes in your balance sheet. Early in your working life, your balance sheet will be affected more by your income statement. Early, you're building assets from a small base. During this time, your income will be the main source of assets added to your balance sheet. As assets grow over time, income adds a smaller proportion to assets each year.

In a business, the difference between gross income and expenses is labeled profit or loss. Your income statement will look at the difference between net income and expenses. Call that number what you want - profit, loss, victory, defeat, whatever. Your goal is to have income exceed expenses; your financial stability depends on it.

The hardest part of putting together an income statement is accurately recording expenses. Recurring expenses that leave a trail, like rent, mortgage payments, and insurance premiums are easy to track. Non-recurring expenses and ones that fluctuate from month to month like food, entertainment, and gas are harder to track.

Paying cash makes it harder to keep track of expenses, though paying with cash helps control overspending. Paying with a debit or credit card creates a record you can review to record expenses. Using a credit card is only recommended if you pay the credit card bill in full every month. Saving all receipts and keeping a log of all expenses will also help create a more accurate income statement. **The goal is to know where all of your money is going every month.** If you know where your money has been going, you can redirect it to where you want it to go. It isn't the larger known expenses like a mortgage that create income-expense imbalances; it's things like dining out that don't seem like much but can really add up over a month or a year. You may be surprised at how much you actually spend on some expenses when you start keeping an accurate record.

Cash flow deals with the timing of income and expenses. For most households, cash flow isn't a major consideration because both income and expenses are consistent from month to month. If income is irregular, or if it comes less frequently than expenses, cash flow may be an issue. Also, if some expenses are large but infrequent, like an annual property tax bill, cash flow may suffer.

If income and/or expenses don't follow a regular pattern from month to month, a reserve fund is needed to cover expenses that get ahead of income. A reserve fund can get started when income exceeds expenses. The fund can then be used when expenses exceed income. Over the course of a year, income and expenses should smooth out. During shorter periods, cash flow may be uneven. If so, a reserve fund will enable you to make all payments on time and protect your credit rating.

Personal balance sheets and income statements are analytical tools to help you find where your money is going and how much is staying with you. If you want more control over where your money is going and you want more of it to stay with you, creating these statements is one of the best ways to start.

(Templates for balance sheet and income statement are in the appendix.)

TAKING CONTROL

One of the most effective psychological tools in breaking down a prisoner is creating the feeling in the prisoner's mind that he has no control. Everyone wants to control their lives; one of our greatest fears is the fear of losing control. At various times, we all experience feelings of loss of control and the psychological stress that goes with it. Some of the loss of control is caused by external forces; much of it is our own doing.

Mention the word *budget* to most people and they cringe. They cringe because they misunderstand a budget's purpose. A budget is often viewed as an indictment for reckless spending and as punishment for same. A budget shackles the individual to a program of austerity and denial that sucks all the joy out of life. Someone who has to "go on a budget" feels the resentment and humiliation of a chastised child. *Budget* is a dirty word because it's seen as a reaction to money mistakes, not as a proactive way to prevent mistakes.

A budget is not a loss of control of spending; it is gaining control of spending. A budget is you telling your money where to go; not asking where your money went. A budget is not present punishment; it is liberation from future punishment. A budget is not proof of financial incompetence; it is proof of good financial stewardship. If a budget causes a reduction of short-term pleasures, it more than offsets it by greatly increasing long-term financial security, opportunity, and success.

Someone may have an externally imposed budget if they fail to create their own budget. If their failure is big enough, an outside overseer like a bankruptcy judge takes control and imposes a budget. No one wants that. One reason so many people cringe at the idea of a budget is they feel that a budget will constrain them. No budget can constrain you. A budget is nothing more than words and numbers on a spreadsheet. A budget by itself won't be able to constrain you if you see something at the mall and you "just have to have it."

The purpose of a budget is not to constrain, but to direct. A budget is a rudder, not an anchor. When people see their spending patterns and how those patterns hurt them in the long run, they will instinctively want to change those patterns on their own, without feeling constrained into doing it by a budget.

It's better to be drawn to do something than to be pushed to do it. A budget-as-constraint is like being pushed against your will. As soon as temptation presents itself, someone in the household will crack, and the budget will be busted. A budget-as-direction will draw everyone in the household to a better financial place. They will all be motivated for the right reasons, and success will be far more likely. Changing their spending patterns is something they will *want* to do, not something they feel they *need* to do.

Your budget should be created by you. You would decide how you want your income allocated. You would also create a record of where your money is currently going. A budget would show you the difference between where your money is going and where you want it to go.

Making the shift from your current situation to your new priorities should be evolutionary, not revolutionary. You would look at how much is currently going to each spending category. You would look at categories that are not getting enough funding, such as savings. You would develop a timetable to reduce the amount being wasted (such as credit card interest) and increase the amount to categories like savings. Each month you would shift a little more money from where it was misspent to the categories you determined are important.

Your finances should adapt to your budget. Your budget shouldn't beat your finances into submission.

Once a budget is established, the budget can actually be liberating, rather than constraining. In creating a budget, a family prioritizes their spending. Without a budget, money to be shared or saved will amount to whatever is left at the end of the month. Of course, without a budget, there is no money left at the end of the month. A budget is the best way to put yourself at the head of the line to get your share of your money.

A budget is also liberating because it can eliminate disputes about how much should be spent in what categories and which categories take priority. A budget sets priorities and limits, and it promotes self-control in spending. It also promotes team spirit and a shared vision for the household. A household budget developed with everyone involved (even children) can have positive effects for a family beyond the financial.

If you write down what you want, whether it's a plan to manage time or manage money, you begin to take control. You are saying "This is mine!" and that you, and only you, are going to decide how it is to be used. To create a budget is to take control. There's no better feeling.

HEAD OF THE LINE

Six months ago you went to work like any other day. At 10 o'clock, everyone was called into a meeting. The company was going through a rough period, so everyone was dreading this meeting. Layoffs were expected.

After giving a status report on the company's finances, the CEO announced that payroll reductions were necessary. Everyone was expecting layoffs, but the CEO gave the employees a choice.

Choice One: Five percent of the employees would be laid off. They would be chosen at random, so every employee had a one in twenty chance of becoming unemployed.

Choice Two: Every employee, from the CEO down, would take a 5% pay cut, effective immediately. Everyone would also keep their jobs.

That afternoon, the employees voted on which choice they preferred. By an overwhelming margin, they chose a 5% pay cut over 5% layoffs. The certainty of a 5% pay cut seemed better than the possibility of a 100% pay cut.

While you didn't like the idea of a pay cut, you were able to make the necessary adjustments to pay your bills. You became more careful with your spending, but your lifestyle was largely unchanged. After six months, you didn't even notice you'd taken a pay cut.

Six months before the company-wide meeting, you were in another meeting. It was a presentation on the company's 401(k) retirement plan. You were not participating in the plan. They talked about the importance of investing for retirement, about investment options, and about the company match on contributions.

It all sounded good, but you didn't think you could spare any income to participate at that time.

Looking back on it now, you realize you could have spared some income to begin investing in your 401(k) plan. You also realize something else.

When the take-home pay reduction was your choice and you were the beneficiary, you couldn't do it.

When the reduction wasn't your choice and you weren't the beneficiary, you discovered you could.

When we're tested by outside forces, we find we're capable of more than we thought. That's good. It also means we underestimate our capabilities. That's bad.

Many people don't save at all or don't save enough because they don't believe there's money to spare. Then some outside force comes along and they discover their true capabilities.

If those people recognized their capabilities and started saving earlier, they would have money to use in a financial emergency like a pay cut. They could also suspend saving until the emergency passed, freeing up money to help get through the emergency.

When it comes to putting money aside for their own benefit, the main reason so many don't isn't because they're incapable. **The main reason is they choose to stand at the end of the line.** By the time they get to the head of the line, the money is all gone.

If you're the one working and sacrificing for your money, shouldn't you be standing at the head of the line to benefit from it?

When asked this question, many people respond by saying they have all these other obligations to pay first. It's important to meet one's financial obligations. But many of those other obligations wouldn't exist or would be smaller if the obligation to oneself had been met first. People who spend all they make and don't save might argue that money to pay themselves first can't be created out of thin air. True, but it could have been created by spending a little less on everything. If you resolved to save 5% of your income, you could come up with the money by spending 5% less on the things you spend money on now. You could also designate 100% of pay raises to go to savings.

It isn't a matter of income; it's a matter of priorities. There are people making a million dollars a year who don't save a dime. There are also people making 5% of that who manage to save 15% of their income. No matter how much you make, unless you move to the head of the line, you won't be able to save anything. There are an endless number of spending opportunities ready to cut in line ahead of you if you let them. Plant yourself at the head of the line and don't move!

One of the easiest ways to get to the head of the line and stay there is to pay yourself first – literally. Have money taken out of your paycheck – before you get it – and have it deposited directly into your 401(k) plan or a savings account where you won't touch it. If you look at your pay stub, you'll notice there's a deduction that's already made from your paycheck – taxes. If this system works for the government, it will work for you, too.

Beginning a savings program where you pay yourself first is a little like giving blood. It stings a little at the beginning, but very quickly you don't even feel it. It's also like giving blood in another way. What you give up is hardly missed and will get replaced in time. And what you give up serves a greater purpose where it's going.

FUTURE VALUE

IN THE HOLE

If you lived in Birmingham, England in 1816 and you couldn't pay a court-ordered judgment, you were likely to be sent to debtor's prison. You would have to pay for your keep through prison labor, and you would also have to work to pay off your debt before being released.

If you lived in Birmingham, Alabama in 2016 and you couldn't pay a court-ordered judgment, you were likely to be sent to prison. Miscellaneous court fees, fines, and charges would cause the amount you owed to triple. There would be no prison labor available to pay off the debt, and you weren't allowed to return to your job to earn money to pay off the debt.

The penalties for unpaid debt haven't changed much in two centuries. People can still be sent to jail for owing small amounts of money the court ordered them to pay. The difference between the nineteenth and twenty-first centuries is there is much, much more debt now.

If all personal and government debt were allocated to each American family, it would take those families more than five years to pay it off, using every penny they made. That debt doesn't include home mortgages, either.

Governments have been worse than households in adding debt. Even after adjusting for inflation, the per capita share of the federal debt is *fifty times* what it was a century ago.

The first modern credit card was issued by Bank of America in 1958. The average American household had more than \$7,000 in credit card debt in 2016.

In 2010, total student loan debt surpassed total credit card debt for the first time. In 2016, the average student loan debt was over \$33,000. **Student loan debt impedes**

marriage, children, home-buying, and business startups, especially for graduates under thirty. Student loan debt impedes the entire economy.

Debt creates a financial hole. The first thing to do when you're in a hole is – stop digging. **The first step in reducing debt is to stop taking on more debt.** It may feel like going through drug withdrawal, but reducing debt first means getting rid of all credit cards. It also means declining all offers for new credit. If you've gotten into trouble with debt, you'll never get out of trouble unless you cut off all sources of debt.

The most common feeling expressed by people who report debt problems is a loss of control. This loss goes beyond the loss of financial control. People overrun by debt lose control over their bodies and minds. They suffer huge increases in physical and mental problems, relative to the general population. The emotional stress can break families apart. **Money problems, specifically overwhelming debt, are a leading cause of divorce.**

In 1956, William Fair and Earl Isaac began using mathematics and computers to analyze credit risk. They created the FICO (short for Fair Isaac Corp.) score. It's more common name is the credit score.

FICO scores range from 300 to 850. Most people score between 650 and 750. The score is based on ratings in five general categories:

- Payment History 35%
- Amounts Owed 30%
- Length of Credit History 15%
- New Credit 10%
- Types of Credit Used 10%

You can improve your credit score with these steps:

- Pay your bills on time.
- If you missed payments, get current and stay current.

- Contact creditors or see a legitimate credit counselor if there's a problem.
- Keep balances low on credit cards.
- Pay off debt rather than moving it around.
- If you have a short credit history, don't open several new accounts too rapidly.
- Shop for a loan in a short period of time; it shows you're seeking a single loan and not multiple loans.
- Don't open new accounts you don't need.
- Don't co-sign loans for others.

The best way to reduce debt and raise your credit score is with a good-paying job. But high debt and a low credit score can be a major barrier to getting that job.

Part of the background check for job applicants now includes obtaining a copy of the applicant's credit report. There are reasons to check an applicant's credit history.

An employer runs a risk if an employee has financial problems. Theft from the employer is the most common risk. Theft of property is a risk, but the greater risk is the theft of money, primarily through fraud.

An employee with financial problems also presents the risk of a frivolous lawsuit. An employee with overwhelming debt may see a lawsuit as a source of cash and a way out of debt.

Your credit report can show a potential employer how you manage your affairs. If your personal financial management is a disaster, they will doubt your management of their business affairs will be any better.

A Chinese proverb is: Luck is when preparedness meets opportunity. Debt can leave you unable to take advantages of opportunities. A financial corollary to the Chinese proverb is: Light Load + Liquidity = Luck. Keep your debt load as light as possible. Set money aside where it's accessible. You'll be amazed how many opportunities will cross your path. More important, you'll be able to take advantage of those opportunities.

Every person has an individual tolerance for risk; they also have an individual tolerance for debt. If you struggle to make debt payments and provide the necessities, you are past your tolerance for debt.

You may be financially capable of servicing more debt; you may not be psychologically capable. If the thought of borrowing more money troubles you, pay attention. The benefit of a purchase made with borrowed money may be more than offset by anxiety from the extra financial burden.

Too many people obsess about their credit score. They take great pains to keep the score as high as possible, including taking on new debt they don't need. Many of the actions that improve your credit score can hurt you financially in the long run.

Focus on your overall financial stability. **Keep debts to a minimum and honor the debts you make.** These two steps will give you a very good credit score. It will

also put you in a position where you may not need credit at all.



RETIREMENT STARTS AT GRADUATION

There are certain advantages to getting older. One advantage of age over youth is the young must imagine being old; the old must merely remember being young.

Remembering is easier than imagining, but it can still be tricky. When thinking across time, we remember the past better than it was, we view the present worse than it is, and we imagine a future better than it will be.

Old people may remember being young, but they have to imagine being young today. Being young today is different than in the past. A big difference is young people have to imagine being old while they're still young.

Today's young will live longer than any previous generation. They will also have a greater task of funding retirement than any previous generation. They may also be caring for aging parents, raising children, and saving for their retirement, all at the same time.

When Social Security began in 1935, half the workers never got to 65 and retirement. Those who made it lived an average of five more years. Most started working by age 15. They worked ten years to earn one year of retirement.

Workers in their twenties today may spend one year retired for every two years working. Twenty or thirty years of retirement won't come cheap. They will have to accumulate a lot of wealth while they're working.

You read about the price of procrastination earlier. That price was in dollars. Procrastination exacts a price in other ways, too. Retirement gets postponed because there isn't enough money. Retirement gets downscaled because income isn't enough to maintain the same lifestyle. Independence and dignity suffer.

In the past, lifespans were shorter and people had pensions that guaranteed lifetime incomes. Age determined when people retired. Most people retired when they could collect Social Security. Until the 1980's, mandatory retirement ages were common.

For a young worker today, age won't determine when retirement begins; health and wealth will.

Health will determine when retirement begins because poor health could make working impossible. Some jobs are too physically hard for older workers, even healthy ones. If mental health declines, so will productivity. If productivity declines, older workers may be forced into retirement.

Good health could be a mixed blessing. Good health may enable some to work longer. They may also live longer and need more money for retirement. Working three more years may be good. Living ten more years may be good. The extra years working won't pay for the extra years in retirement, though.

Maintaining good health and treating bad health both come at a price. While no one knows what health insurance will look like in forty or fifty years, it will be expensive. Getting, keeping, and paying for health insurance will help determine when and if retirement comes.

If health issues don't force someone to work longer or retire sooner than planned, wealth will determine when and how well someone can retire.

Social Security will be around for the foreseeable future. The retirement age and the tax rate may both increase, however. Social Security shouldn't be the main retirement income; it was meant to be a safety net, not a hammock. A decent retirement will require you to pay for most of it yourself.

People always want to know their "magic number" – how much money they will need to save before they can retire. That number is based on several factors: how long a retirement, income needed each year, other income, inflation during retirement, investment returns.

As a starting point and nothing more, a good "magic number" would be 20 to 25 times the income needed from investments in the first year of retirement. For example, if \$50,000 were needed from investments in the first year, the magic number would be \$1-1.25 million. This amount, properly invested, would likely be enough. It could provide steady income for life, enable increases to cover inflation, and continue income even when markets drop.

How does a young worker, just out of college and new to a job, start to save for retirement? Look to the employer for help.

Most employers offer a retirement plan, like a 401(k). Many employers do some matching contribution to boost employee participation. If a young worker begins saving 10% of income and if the money is properly invested, chances are excellent there will be enough money to retire at a reasonable age with a reasonable income.

Think of retirement funding as a wall to be scaled. The only way to avoid scaling the wall is to never retire. The only way to never retire is to work until you die. Since that may not be an option (even if you wanted it), assume you will have to scale a wall. You have some say on the wall's height. The earlier you want to retire and the more money you want in retirement, the higher you make the wall.

You will use a board to scale the wall, putting one end on the ground and the other on the top of the wall. The length of the board is determined by two things how early you start saving for retirement and how much you save each month. Saving earlier does more to lengthen the board than saving more (remember Jean and Sue). Saving early and a lot make a long board; saving late and a little make a short one.

If your wall isn't too high and you started saving early and save at least 10%, you can easily walk up the board like it's the gangplank on a cruise ship. However, if your wall is high and your board is short, you may not be able to scale the wall. You will have to lower the wall and lengthen the board. Both will require sacrifices.

The best way to finish at the top of your retirement class is to be first in your graduating class in planning for retirement.



ABOVE AVERAGE

As long as there's been a Wall Street, there have been people hatching plans to "beat the street". Some have been legitimate attempts to outperform the market. Most have been schemes to separate the gullible from their money.

If you're hoping to find a legitimate way to "beat the street", this lesson is as close as you'll get. For our purpose here, we will define "the street" as the S&P 500. The S&P 500 is a collection of 500 stocks of some of the largest and most well-known American companies. The lineup of companies changes about 5% each year, as companies move up or down in rankings.

The goal is to outperform the S&P 500, but without taking on any more risk than the S&P 500. To make sure we don't take on more risk than the S&P 500, we invest *only* in the S&P 500.

If we only invest in the S&P 500, and we're trying to outperform the S&P 500, the obvious way to do that is by market timing. Market timing attempts to move in and out of a market to capture more of the peaks and fewer of the valleys. Market timing doesn't work; at least no one has made it work consistently.

There is a method to buy more shares when the market is cheaper and buy fewer shares when the market is more expensive. This method requires no fortune-telling; it is brilliant in its simplicity and will lead to superior investment returns.

Here's how this method works. Take a percentage of your income this month and invest it in the S&P 500. Do the same thing next month. And the next month. And the next month. Keep doing it as long as you're earning an
income. That's it.

You probably don't believe something so basic, so uncomplicated, so utterly simple could possibly yield above-average returns. It can, and it does.

This sure-fire method of superior returns is not new. You may already be using this method without realizing it. If you're investing money into your 401(k) plan every month, and you put the same amount every month into the same investment, you're following this method. Its formal name is **Dollar-Cost Averaging**.

Here's how it works in its simplest form. If you invest \$100 a month in a mutual fund, and the share price that month is \$25, you'll buy four shares. If the share price the next month drops to \$20, you'll buy 5 shares. You automatically buy more shares when the price is lower and fewer shares when the price is higher. In this simple example, you bought 9 shares for \$200, or \$22.22 per share, even though the average price during this period was \$22.50.

There is a chart in the appendix showing a dollar-cost averaging plan with the S&P 500. The initial annual investment was \$5,000 and increased 4% per year. It was a forty-year investment plan, representing the fortyyear working life of most Americans. The share prices were the year-end values of the S&P 500 for each year from 1968-2007. This period included plenty of bull and bear markets, some of the best and worst times.

Some important observations from the chart:

- Annual investment increased with pay raises.
- In only 6 of 40 years did the account value decline.
- In those down years, more shares were bought than in the previous year.
- Total shares owned grew every year; only the rate of growth varied.

Over this 40-year period, the S&P 500's share price grew at an average annual rate of 6.9%. The average annual return of this portfolio was 8.5%.

The *investment* returned 6.9%. The *investor* received 8.5%. The difference between the investment return and the investor's return is totally the result of dollar-cost averaging – automatically buying more shares when the price drops and fewer shares when the price rises. The difference in dollars is significant. The 6.9% return would have a final amount of \$1,769,097. The 8.5% return would have a final amount of \$2,393,001. The difference was an additional \$623,904, more than 35%.

Dollar-cost averaging does not guarantee a profit or prevent a loss. Continuously investing in the same investment regardless of price fluctuations magnifies gains; it doesn't guarantee them.

The S&P 500 makes an ideal investment for dollar-cost averaging. It won't go belly-up like an individual stock might. It gets tweaked slightly each year to keep it relevant. It doesn't rely on active management.

Making regular, continuous investments in the S&P 500 via mutual fund or exchange-traded fund (ETF) could be the simplest yet most effective way for you to build long-term wealth. It's set-it-and-forget-it. It does require you to stick with the method through thick and thin. You can't get greedy when the market is hot, or panic and sell when the market turns cold.

You don't need to be smart to become wealthy. You don't need to time markets or even understand markets. Let others knock themselves out trying to "beat the street." You will surely beat whatever they conjure up. Dollar-cost averaging is the most successful and the most democratic method of creating wealth ever devised.

PLAYING DEFENSE

In the movie, *The Blind Side*, a family takes in a young man who becomes a highly recruited offensive lineman. The mother explains why football offensive linemen are important and well-paid with this analogy.

Every housewife knows that, after you pay the mortgage, you next pay the insurance premiums. You don't risk losing your home by not paying the mortgage. You don't risk losing everything else by not paying for insurance to protect it. The offensive linemen are the quarterback's insurance.

Insurance is important, but it rarely gets the respect it deserves. In another movie, *Take the Money and Run*, Woody Allen is a bumbling criminal sentenced to a chain gang. For one punishment, he is forced to spend several days locked up in a sweatbox with an insurance salesman.

Some risks we can and should insure against are:

- Major medical bills (medical/health insurance)
- Income loss from illness/injury (disability insurance)
- Unintentional harm to others (liability insurance)
- Financial loss from death (life insurance)
- Loss to home or personal property (homeowners or renters insurance)
- Damage to your vehicle (collision/comprehensive insurance)

• Extended illness or injury (long-term care insurance) The more you have to lose, the more you need insurance.

Financial strength begins with defense. Insurance is the foundation of that defense. It won't matter how large your assets are if those assets can all be lost due to events beyond your control. Insurance doesn't protect you from a bad event; it protects you from the financial consequences of it. Your behavior is your best protection from bad events. But even careful people experience bad events. Insurance makes a bad event more bearable.

Uncertainty triggers stress. By defending against the financial consequences of a bad event, uncertainty is reduced, along with stress.

Many people equate insurance with gambling. They think insurance is betting on a potential loss. They may also think they've lost a bet with the insurance company if they don't have a loss. If you've had a loss that was covered by insurance, you were glad you had insurance. However, you would have probably preferred to have had no loss at all.

Insurance is the opposite of gambling. Gambling creates a risk of loss where none existed. When you buy insurance, you take an existing risk of loss and transfer it to the insurance company. To make this transfer, you take the sure loss of the insurance premium payment.

There are a couple of guidelines when deciding whether you need insurance and how much you need. First, **don't risk a lot to save a little.** Don't risk losing your home and its contents to avoid spending a thousand dollars a year to insure it all. Second, **don't spend a lot to reduce risk a little.** Extended warranties and low deductibles offer little coverage at high costs. **Insurance is for events that create a financial hardship.**

For decades, medical insurance was available mostly through employers. This benefit came about during World War II, when wage freezes were in place. Employers began offering medical insurance to combat wage freezes and labor shortages. For decades, people needed a job to get access to medical insurance. Medical insurance is now available for everyone, so there is no longer an excuse to be uninsured. Medical insurance protects against expenses that can be frequent, severe, and unpredictable – the main things insurance protects against. Uninsured medical expenses are the single biggest cause of personal bankruptcies. Every financial goal you have hinges on being insured against catastrophic medical expenses. It really is that important.

Becoming disabled, even temporarily, takes a heavy toll. There is the physical trauma that created the disability. There is also the psychological toll of a disability, which may be worse than the physical toll.

People know about life insurance; they often ignore disability insurance. You are fifteen times more likely to become disabled than to die during your working life. Disabilities tend to be short or long; either less than four months or more than two years. Also, unlike with death, your expenses continue and often increase with a disability. **The risk of disability and the financial consequences are both too great to ignore.**

Next to a permanent total disability, the worst financial disaster for a family would be the death of the breadwinner. The term *life insurance* is really a misnomer; a more technically correct name would be *risk-of-premature-death insurance*, but that's a hard sell.

Life insurance is typically used to replace lost income for the financial dependents of the deceased. If no one depended on you for income, or if your death had no financial consequence for anyone, you wouldn't need life insurance. In calculating how much life insurance you need, you want your beneficiaries to maintain the lifestyle they had. The death of a loved one is hard enough; financial hardship should be avoided. If you have a mortgage on your home, you're required to have homeowners insurance. Homeowners insurance protects the dwelling, your personal property, and also insures you for liability in many situations, both at home and away. Even if you don't have a mortgage, you need homeowners insurance. The cost is nothing compared to what you might lose.

If you're a renter, you need renters insurance. Renters insurance is similar to homeowners insurance, minus coverage on the building. Renters have risks from other renters that homeowners don't have, making renters insurance at least as important as homeowners insurance.

Your state sets auto insurance requirements. Their only requirement is for liability coverage, which protects other people if you cause an accident. **The minimum limits set by states for auto liability coverage aren't enough to properly protect you.** Most people find this out only after they get sued.

If you have a car loan, you need collision and comprehensive coverage. This coverage will repair or replace your car if it's damaged, regardless of fault. If you don't have a car loan, but you can't afford to replace your car out-of-pocket, you need this coverage.

There are other types of insurance, such as umbrella policies and long-term care, which become important as you get older and have greater wealth. If you're not there yet, focus on medical, disability, liability, and life insurance needs first. They protect against your biggest threats.

Legendary football coach Bear Bryant is credited with saying "Offense sells tickets, but defense wins championships." Insurance is your defense. It protects your blind side. Without the protection of insurance, you don't have a financial plan; you just have dreams.

JACKS AND MASTERS

If someone called you a "Jack-of-all-trades", how would you take it? You might take it as a compliment - a way of saying you are skilled in multiple areas. You might even equate the term with "Renaissance Man", a profound thinker on a variety of topics.

You might also stop to look up the definition of *jack*. One definition is a man who does odd or heavy jobs, like a lumber*jack*. Another is a male animal, especially an ass. Then you remember the rest of that saying: "and master of none." Now you feel more insulted than complimented.

During the Great Depression, most of the population was broke. They had to do most things for themselves because they couldn't afford to pay others to do them. Out of necessity, many became jacks-of-all-trades. While the individuals did learn some skills, they could never match the work of professionals. The overall quality of work suffered. The economy suffered too, as fewer people work for pay in a do-it-yourself world.

Some skills are easy to learn, and you may learn them out of necessity. You may cut your grass or change your car's oil yourself because you prefer not to pay someone to do it. Some skills, like woodworking, you may acquire just because you want to.

Competency in a variety of areas can be a good thing. It can be very handy to know how to unclog a toilet, change a tire, or make spaghetti sauce. A certain amount of that "rugged individualism" Americans admire is good. **But the more skills you acquire, the harder it is to become really good in any of them.** There's another old term that's relevant here: "Pennywise and pound-foolish." The term refers to someone who takes care in small matters, but not in big ones. It can also refer to someone who sees the small picture, but not the bigger one.

It can be penny-wise and pound-foolish to devote time and effort where the returns are small. Many of our do-it-yourself efforts are penny-wise and poundfoolish. The savings amount to pennies; the costs amount to pounds. We see the savings, but not the costs.

There is a well-accepted theory that 20% of our efforts yield 80% of our results. Richard Koch, author of *The 80/20 Principle*, recommends doing the following:

- 1. focus on exceptional productivity; ignore average efforts
- 2. look for short cuts
- 3. maximize control over your life with minimum effort
- 4. be selective, not exhaustive
- 5. become excellent in a few things, not just good in many
- 6. delegate and outsource as much as possible
- 7. choose careers with extraordinary care
- 8. become self-employed if possible
- 9. only do what you do best and enjoy most
- 10. seek ironies, oddities, and abnormalities to exploit
- 11. look at everything through the 80/20 lens

Note especially numbers 1, 5, 6, and 9. They are specific to the topics of a jack-of-all-trades and penny-wise and pound-foolish with your time and effort.

Even if you're the best person at a particular task, you may not be the best person to perform it.

In many small businesses, the CEO may be more skilled at several tasks than any employee. The CEO probably learned those skills in the process of building the business. The CEO may be tempted to personally do many of those tasks because of his/her higher skills. But that would be a mistake.

The CEO may be able to perform many of the tasks in the business, but the tasks the CEO should be doing are those that *only* the CEO can do. The highest value tasks for anyone are not the many tasks that no one else can do better; the highest value tasks are the few tasks that no one else can do at all.

For example, the CEO of a graphics firm may be better at laying out print advertising than any employee. But the CEO is also the only person at the firm who can negotiate contracts and bring in new customers. The CEO has to allocate his/her time and effort where it pays the biggest dividends.

A CEO doesn't have the luxury of being a jack-of-alltrades. A CEO can't afford to be penny-wise and poundfoolish. And a CEO must devote energies to the 20% of work that yields 80% of the results; in this case, negotiating contracts and bringing in customers, not laying out ads.

It pays to pay for good people. Very often when people try a do-it-yourself approach, they pay triple. First, there's payment of their own time and effort in doing the task themselves. When that doesn't work, they have to hire a professional to come in and undo the mess. Finally, the professional does the task the way it was supposed to be done in the first place.

Benjamin Franklin said, "The bitterness of poor quality remains long after the sweetness of low price is forgotten." Sir Henry Royce, the founder of Rolls-Royce Motors, said of his very expensive cars, "The quality is remembered long after the price is forgotten." Both statements are true, whether referring to products or services. Pay good people for good work, and you'll savor the sweetness of high quality. Try to do it yourself, and you may be gagging on the bitterness of poor quality.

It's estimated that it takes about 10,000 hours of practice to become an expert in most fields. Depending on the field and the individual's talent level, this figure may vary considerably. It's also estimated that the top 20% in most fields earn more than the remaining 80% - another variation of the 80/20 principle.

The time spent to become an expert is equivalent to five years of full-time employment. Over a 40-year working life, you could conceivably become an expert in eight different fields. Some 60-year-old CEOs have had comparable career paths. A CEO needs a broad range of skills to see unseen connections and position the organization for the future. The difference between such a CEO and the average jack-of-all-trades is the CEO has both a breadth and a depth of skills. **The jack-of-alltrades has breadth but no depth. And the 21st century job market values depth over breadth in most fields.**

There's nothing wrong in mastering multiple skills. You should strive for mastery. But trying to become a master of more than one trade at a time is likely to leave you no better than a jack-of-those-trades. Focus your energy on becoming the best you can be in the field of greatest importance to you. Once you achieve mastery, you're encouraged to take up a new challenge.

Two of the smartest investments you can make:

- 1) Develop mastery in your chosen profession.
- 2) Hire people who have mastery in their profession.

YOUR MARKET VALUE

What kind of skills – make that superpowers – would you have to possess to be worth 20,000 teachers?

No one without superpowers could be worth 20,000 teachers, at least when it comes to their positive effect on individuals. That doesn't mean someone's work couldn't have a similar market value as 20,000 teachers.

In 2014 (the most recent year for data), there were five hedge fund managers who each made more than 20,000 times the average teacher salary. The average *hourly* wage for *all* hedge fund managers was \$211,538, even though the average return for their funds was ten percent *less* than the return for the S&P 500 in 2014.

There often seems to be little connection between the importance or difficulty of someone's work and what they get paid for it. But **the job market is no different than any other market.** Since everyone's pay comes from somewhere, that pay source is deciding the value of the work justifies the pay.

Pay varies widely among jobs. Brain surgeons make more than janitors for two reasons. Having a brain tumor removed has greater value than having your cubicle cleaned. Second, the difficult path to become a brain surgeon means there are few qualified to do it. Brain surgeons don't have a lot of competition. Becoming a janitor is far less difficult, so there are many potential janitors. Their wages only need to be high enough to attract enough people to meet the demand for janitors.

The professions that offer higher incomes and job security provide high value to the customer, and they don't easily attract competition. The pay level for your work is controlled by the price for the product or service you produce. That price falls within a range. The cost to produce a product or service creates the price floor. The value of the product or service to the customer creates the ceiling. The space between the floor and the ceiling is profit.

Your pay is one of the costs that create the floor. Raising your pay raises the floor. If you raise the floor, you need to raise the ceiling, too. You raise the ceiling by raising the value to the customer. **Before you can get more, your customer needs to get more.**

Whether you become a brain surgeon, a business owner, or a janitor, **your success will depend on your customers' perception of the value you provide.** It's a loop, though. A happy employee produces work that creates satisfied customers. Satisfied customers produce feedback and sales that create happy employees.

Your parents may give you credit for your effort; your employer and the world at large will not. In the workplace, only results matter.

Results are measurable; effort is not. Results are also comparable; they're used to compare you to others. The world is a very bottom-line place. Effort that does not translate into results does not help the bottom line. Your market value is determined by your results, not your effort.

The purpose of a company's compensation system should be to get and keep the best people. It should not attempt to get right behavior from the wrong people.

Money is one way your employer shows appreciation of your work. But more money will not make you love a job any more than it would make you love a person.

You will never love a job you hate just because you are paid more. The rush of a raise will soon fade. You will spend up to your new income level and then feel even more trapped in a job you now hate even more.

Most employees don't realize the hidden costs of keeping them on the payroll. For the average employee, **benefit costs as a percentage of total compensation run around 30%.** For example, if a company is paying an employee \$35,000 a year, they are also paying another \$15,000 for the benefits that employee receives.

There are required insurance and benefits a company must provide and pay for in whole or part. These requirements include workers' compensation, social security, and unemployment insurance. The most common optional employee benefits are:

- Paid Vacations
- Group Medical, Dental, Disability, Life Insurance
- Paid Sick Leave
- Parental Leave
- Education Reimbursement for Job
- Retirement Savings Plan

Some benefits, like paid vacations, are nice-to-have. Others, like medical insurance, are need-to-have. When evaluating a job offer, consider the entire package, not just salary. Generous benefits may more than offset a lower starting salary. It's also more important to get the need-to-have benefits than the nice-to-have ones.

The Myers-Briggs Type Indicator assesses four different aspects of personality and generates sixteen different personality types. One area of assessment is whether a person is an extravert or an introvert.

Income research shows that **extraverts outearn introverts in six of eight categories**, when other aspects are the same. This difference is likely due to extraverts' greater willingness to speak up for themselves. The squeaky wheel gets the grease. If you think you should be paid more, make your case with hard evidence. Then don't be shy about asking to get paid what you're worth. Even if it doesn't come easily, it will be worth the effort.

Money deserves respect because money represents work, and all work deserves respect. Your employer shows respect and gratitude for the work you do through the paycheck you receive. You show respect for your work by knowing the market value of your work and making sure you get it.

If you believe your employer doesn't demonstrate sufficient respect for your work, as evidenced in your paycheck, you owe it to yourself to find an employer who does. If you do go looking, remember the employer you're looking for might just be you.



OF FUTURE VALUE

Regardless of their field of study, experts agree that the single biggest difference between humans and all other species is our imagination. We are the only creatures on earth that can form a mental picture of something that isn't there, that we've never experienced, or that has never existed.

Our imagination's greatest creation is the future.

At this moment, there are at least seven billion futures being imagined. Everyone imagines a future for themselves; many imagine multiple futures. Leaders and other visionaries imagine futures for entire societies, even for the entire planet. The number and types of futures are products of our imagination and are limited only by our imagination.

Humans can comprehend and measure time – past, present, and future. We can also measure future value, most specifically with money. These abilities enable us to calculate in hard numbers the future value of something that is only in our imagination.

Our abilities enable us to predict with reasonable accuracy what we will need in the future. We can also calculate what we have to do between now and then to meet our needs. But predicting future needs and acting to meet them are two very separate endeavors.

Even when an animal prepares for the future, it does not think about the future. When a squirrel stores nuts for the winter or a bird builds a nest to lay eggs, they're acting on instinct alone.

Humans have instincts, but our ability to think enables us to override our instincts. We may know instinctively that we have to prepare for the future. We can also think ourselves out of preparing. We can come up with plenty of reasons why we can't or don't need to prepare. If you're going to override instinct, you have to replace it with wisdom and discipline – the wisdom to know what to do and the discipline to do it.

We are very good at calculating future value, at least where money is concerned. There are formulas, tables, and software programs that can tell you precisely the future value of money for any period of time and any rate of return.

Theoretically, you could calculate to the dollar what you would need to retire at a certain date. Those calculations would only be theoretical because such calculations assume everything moves in a straight line.

Life does not move in a straight line. The biggest events in our lives typically come out of nowhere. Your ability to adapt is even more important than your ability to predict in creating a future you want.

The more specific the prediction, the more adjusting that prediction may require. If you predict next January 15th will be cold, you're more likely to be right than if you predict the high temperature that day will be 23 degrees.

As long as you're moving in the right direction, your predictions don't have to be overly specific. It's better to know you should save ten percent of your income to retire on schedule than to predict exactly how much you'll need to retire.

Future targets are moving targets. To reach them, you need to be going in the right general direction. Then you need to be able to adapt to their movement by making the necessary adjustments along the way. A ship's captain sets a heading, but then makes constant adjustments to account for wind and currents on the way.

How much thought have you given to your future where money is concerned? Reading this book indicates you are giving it serious thought. Hopefully, you're giving it serious thought without obsessing over it.

To think too much about future money might cause you to miss out on the present. It's sad to see someone who has more than enough money later in life, but who never enjoyed anything on the way there. You can't ignore the future, but you shouldn't sacrifice the present for it, either.

It's even sadder to see someone who only lived for the present and never prepared for the future. Their pleasures that are now in the past will be paid for by pain in their future.

Remember Aesop's fable of the ant and the grasshopper. You don't want to be the grasshopper in winter; you don't want to be the ant in summer, either. Imitate the bee instead. They work hard in summer. They build a hive and produce honey to get them through winter. They also take time to get out and enjoy the flowers.

As you work toward making the future you imagine a reality, don't forget the financial piece. The financial piece is often the make-or-break part of someone's future plans. Here are some final thoughts as you move toward your future.

Begin every financial transaction by asking "Why?" Asking why will make you think about the reasons for what you're doing. It will enable you to take actions for the right reasons and avoid taking actions for the wrong ones. And if you don't have a good answer to "Why?" it's a signal to do nothing until you do.

Spending on experiences is more rewarding than spending on things. At some point, almost everything you spent money on will be just a memory. You are more likely to look back fondly on a trip you took thirty years ago than a car you bought thirty years ago. Spending on experiences is also how you grow as a person. Such spending (within reason) is actually an investment in your growth.

Don't drain your soul to fill your wallet. Aim for proper prosperity. Wealth is good or bad based on the method used to obtain it. Cutting corners and compromising your integrity may seem acceptable on the way up, but once you're there you'll regret the price you paid.

Where your treasure is, there your heart will be also. Jesus spoke these words at the Sermon on the Mount. We tend to think we put our treasure where our heart is, and we do to an extent. We financially support what we emotionally support. Jesus points out that we do the opposite even more. What you invest in financially, you invest in emotionally, too. Make sure your money is going to places where your heart will also want to be.

Your best investment is you. Creating a better you creates greater future value. Education and self-improvement should not end with graduation, marriage, a promotion, or any other life event. Ideally, it should only end at death. Any investment in time, effort, and money to improve yourself will pay better returns than any stock you could ever own.

Make your future something of value. You'll be spending the rest of your life there.

ANNUAL RETURNS OF STANDARD & POORS 500

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	S&P 500		S&P 500		S&P 500		S&P 500
YEAR	RETURN	YEAR	RETURN	YEAR	RETURN	YEAR	RETURN
2015		1979	18.69	1943	23.6	1907	-24.21
2014	13.8	1978	6.41	1942	21.74	1906	0.64
2013	32.43	1977	-7.78	1941	-9.09	1905	21.29
2012	15.88	1976	24.2	1940	-8.91	1904	32.16
2011	2.07	1975	38.46	1939	2.98	1903	-17.09
2010	14.87	1974	-26.95	1938	17.5	1902	8.28
2009	27.11	1973	-15.03	1937	-32.11	1901	19.45
2008	-37.22	1972	19.15	1936	32.55	1900	20.84
2007	5.46	1971	14.54	1935	54.93	1899	3.66
2006	15.74	1970	3.6	1934	-8.01	1898	29.32
2005	4.79	1969	-8.63	1933	56.79	1897	20.37
2004	10.82	1968	11.03	1932	-5.81	1896	3.25
2003	28.72	1967	24.45	1931	-44.2	1895	5.01
2002	-22.27	1966	-10.36	1930	-22.72	1894	3.63
2001	-11.98	1965	12.45	1929	-9.46	1893	-18.79
2000	-9.11	1964	16.59	1928	47.57	1892	6.14
1999	21.11	1963	23.04	1927	37.1	1891	18.88
1998	28.73	1962	-9.2	1926	11.51	1890	-6.16
1997	33.67	1961	28.51	1925	25.83	1889	7.09
1996	23.06	1960	-0.74	1924	27.1	1888	3.34
1995	38.02	1959	11.59	1923	5.45	1887	-0.64
1994	1.19	1958	43.4	1922	29.07	1886	11.98
1993	10.17	1957	-9.3	1921	10.15	1885	30.06
1992	7.6	1956	6.38	1920	-13.95	1884	-12.32
1991	30.95	1955	28.22	1919	19.67	1883	-5.49
1990	-3.42	1954	55.99	1918	18.21	1882	3.61
1989	32	1953	-0.8	1917	-18.62	1881	0.27
1988	16.64	1952	18.35	1916	8.12	1880	26.63
1987	5.69	1951	23.1	1915	31.2	1879	49.37
1986	19.06	1950	34.28	1914	-5.39	1878	16.29
1985	32.24	1949	15.96	1913	-4.73	1877	-1.06
1984	5.96	1948	9.51	1912	7.18	1876	-14.15
1983	23.13	1947	2.56	1911	3.52	1875	5.44
1982	21.22	1946	-12.05	1910	-3.39	1874	4.72
1981	-5.33	1945	39.35	1909	16.15	1873	-2.49
1980	32.76	1944	19.67	1908	39.47	1872	11.16
						1871	15.64



## THE PRICE OF PROCRASTINATION FIGURES

	RETURN OF	JEAN'S JAN. 1		SUE'S JAN. 1	SUE'S 12/31
YEAR	S&P 500	BALANCE	BALANCE	BALANCE	BALANCE
1954	55.99%	\$600.00	\$935.94	\$0.00	\$0.00
1955 1956	28.22% 6.38%	\$1,535.94 \$2,569.38	\$1,969.38 \$2,733.31	\$0.00 \$0.00	\$0.00 \$0.00
1956	-9.30%	\$2,569.36	\$3,023.31	\$0.00	\$0.00 \$0.00
1957	43.40%	\$3,623.31	\$5,195.83	\$0.00	\$0.00 \$0.00
1959	11.59%	\$5,795.83	\$6,467.56	\$0.00	\$0.00
1960	-0.74%	\$7,067.56	\$7,015.26	\$0.00	\$0.00
1961	28.51%	\$7,615.26	\$9,786.38	\$0.00	\$0.00
1962	-9.20%	\$10,386.38	\$9,430.83	\$0.00	\$0.00
1963	23.04%	\$10,030.83	\$12,341.93	\$0.00	\$0.00
1964	16.59%	\$12,341.93	\$14,389.46	\$600.00	\$699.54
1965	12.45%	\$14,389.46	\$16,180.95	\$1,299.54	\$1,461.33
1966	-10.36%	\$16,180.94	\$14,504.60	\$2,061.33	\$1,847.78
1967	24.45%	\$14,504.60	\$18,050.98	\$2,447.78	\$3,046.26
1968	11.03%	\$18,050.97	\$20,042.00	\$3,646.26	\$4,048.44
1969	-8.63%	\$20,041.99	\$18,312.37	\$4,648.44	\$4,247.28
1970	3.60%	\$18,312.37	\$18,971.62	\$4,847.28	\$5,021.78
1971	14.54%	\$18,971.62	\$21,730.09	\$5,621.78	\$6,439.19
1972	19.15%	\$21,730.09	\$25,891.41	\$7,039.19	\$8,387.20
1973	-15.03%	\$25,891.40	\$21,999.93	\$8,987.20	\$7,636.42
1974	-26.95%	\$21,999.92	\$16,070.95	\$8,236.42	\$6,016.71
1975 1976	38.46% 24.20%	\$16,070.94	\$22,251.83	\$6,616.71	\$9,161.49
1976	24.20% -7.78%	\$22,251.83 \$27,636.77	\$27,636.78 \$25,486.64	\$9,761.49 \$12,723.77	\$12,123.77 \$11,733.86
1978	6.41%	\$25,486.63	\$25,400.04	\$12,333.86	\$13,124.46
1970	18.69%	\$27,120.32	\$32,189.12	\$13,724.46	\$16,289.57
1980	32.76%	\$32,189.11	\$42,734.28	\$16,889.57	\$22,422.59
1981	-5.33%	\$42,734.26	\$40,456.54	\$23,022.59	\$21,795.48
1982	21.22%	\$40,456.53	\$49,041.42	\$22,395.48	\$27,147.80
1983	23.13%	\$49,041.40	\$60,384.70	\$27,747.80	\$34,165.87
1984	5.96%	\$60,384.68	\$63,983.62	\$34,765.87	\$36,837.92
1985	32.24%	\$63,983.61	\$84,611.94	\$37,437.92	\$49,507.90
1986	19.06%	\$84,611.92	\$100,738.98	\$50,107.90	\$59,658.47
1987	5.69%	\$100,738.95	\$106,471.03	\$60,258.47	\$63,687.18
1988	16.64%	\$106,471.00	\$124,187.81	\$64,287.18	\$74,984.56
1989	32.00%	\$124,187.77	\$163,927.91	\$75,584.56	\$99,771.62
1990	-3.42%	\$163,927.86	\$158,321.57	\$100,371.62	\$96,938.91
1991	30.95%	\$158,321.53	\$207,322.10	\$97,538.91	\$127,727.20
1992	7.60%	\$207,322.04	\$223,078.58	\$128,327.20	\$138,080.07
1993	10.17%	\$223,078.52	\$245,765.67	\$138,680.07	\$152,783.83
1994	1.19%	\$245,765.60	\$248,690.28	\$153,383.83	\$155,209.10 \$215.047.72
1995 1996	38.02% 23.06%	\$248,690.21 \$343,242.23	\$343,242.32	\$155,809.10	\$215,047.72 \$265.276.00
1996 1997	23.06%	\$343,242.23 \$422,393.89	\$422,394.00 \$564,614.06	\$215,647.72 \$265,976.09	\$265,376.09 \$355,530.24
1997	28.73%	\$564,613.92	\$726,827.68	\$356,130.24	\$458,446.45
1330	20.13/0	ψJU <del>4</del> ,013.92	ψ120,021.00	ψ000,100.24	ψ-30,4-0.43

YEAR	AMOUNT	YEAR	AMOUNT
1626	\$270	1663	\$2,213
1627	\$286	1664	\$2,342
1628	\$303	1665	\$2,479
1629	\$320	1666	\$2,624
1630	\$339	1667	\$2,778
1631	\$359	1668	\$2,940
1632	\$380	1669	\$3,112
1633	\$402	1670	\$3,294
1634	\$425	1671	\$3,487
1635	\$450	1672	\$3,691
1636	\$477	1673	\$3,907
1637	\$505	1674	\$4,135
1638	\$534	1675	\$4,377
1639	\$565	1676	\$4,633
1640	\$598	1677	\$4,905
1641	\$633	1678	\$5,191
1642	\$671	1679	\$5,495
1643	\$710	1680	\$5,817
1644	\$751	1681	\$6,157
1645	\$795	1682	\$6,517
1646	\$842	1683	\$6,898
1647	\$891	1684	\$7,302
1648	\$943	1685	\$7,729
1649	\$998	1686	\$8,181
1650	\$1,057	1687	\$8,660
1651	\$1,118	1688	\$9,166
1652	\$1,184	1689	\$9,703
1653	\$1,253	1690	\$10,270
1654	\$1,327	1691	\$10,871
1655	\$1,404	1692	\$11,507
1656	\$1,486	1693	\$12,180
1657	\$1,573	1694	\$12,893
1658	\$1,665	1695	\$13,647
1659	\$1,763	1696	\$14,445
1660	\$1,866	1697	\$15,290
1661	\$1,975	1698	\$16,185
1662	\$2,090	1699	\$17,132

## LET IT GROW — COMPOUND INTEREST CALCULATIONS

1700	\$18,134	1740	\$176,247
1701	\$19,195	1741	\$186,558
1702	\$20,317	1742	\$197,471
1703	\$21,506	1743	\$209,023
1704	\$22,764	1744	\$221,251
1705	\$24,096	1745	\$234,194
1706	\$25,505	1746	\$247,895
1707	\$26,998	1747	\$262,397
1708	\$28,577	1748	\$277,747
1709	\$30,249	1749	\$293,995
1710	\$32,018	1750	\$311,194
1711	\$33,891	1751	\$329,398
1712	\$35,874	1752	\$348,668
1713	\$37,972	1753	\$369,065
1714	\$40,194	1754	\$390,656
1715	\$42,545	1755	\$413,509
1716	\$45,034	1756	\$437,699
1717	\$47,669	1757	\$463,305
1718	\$50,457	1758	\$490,408
1719	\$53,409	1759	\$519,097
1720	\$56,533	1760	\$549,464
1721	\$59,841	1761	\$581,608
1722	\$63,341	1762	\$615,632
1723	\$67,047	1763	\$651,646
1724	\$70,969	1764	\$689,768
1725	\$75,121	1765	\$730,119
1726	\$79 <i>,</i> 515	1766	\$772,831
1727	\$84,167	1767	\$818,042
1728	\$89,091	1768	\$865,897
1729	\$94 <i>,</i> 302	1769	\$916,552
1730	\$99,819	1770	\$970,170
1731	\$105,658	1771	\$1,026,925
1732	\$111,839	1772	\$1,087,000
1733	\$118,382	1773	\$1,150,590
1734	\$125 <i>,</i> 307	1774	\$1,217,899
1735	\$132,638	1775	\$1,289,146
1736	\$140,397	1776	\$1,364,562
1737	\$148,610	1777	\$1,444,388
1738	\$157,304	1778	\$1,528,885
1739	\$166,507	1779	\$1,618,325

1780	\$1,712,997	1820	\$16,649,111
1781	\$1,813,207	1821	\$17,623,084
1782	\$1,919,280	1822	\$18,654,035
1783	\$2,031,558	1823	\$19,745,296
1784	\$2,150,404	1824	\$20,900,396
1785	\$2,276,202	1825	\$22,123,069
1786	\$2,409,360	1826	\$23,417,268
1787	\$2,550,308	1827	\$24,787,179
1788	\$2,699,501	1828	\$26,237,229
1789	\$2,857,422	1829	\$27,772,107
1790	\$3,024,581	1830	\$29,396,775
1791	\$3,201,519	1831	\$31,116,486
1792	\$3,388,808	1832	\$32,936,801
1793	\$3,587,053	1833	\$34,863,603
1794	\$3,796,895	1834	\$36,903,124
1795	\$4,019,014	1835	\$39,061,957
1796	\$4,254,126	1836	\$41,347,081
1797	\$4,502,993	1837	\$43,765,886
1798	\$4,766,418	1838	\$46,326,190
1799	\$5,045,253	1839	\$49,036,272
1800	\$5,340,400	1840	\$51,904,894
1801	\$5,652,814	1841	\$54,941,330
1802	\$5,983,503	1842	\$58,155,398
1803	\$6,333,538	1843	\$61,557,489
1804	\$6,704,050	1844	\$65,158,602
1805	\$7,096,237	1845	\$68,970,380
1806	\$7,511,367	1846	\$73,005,147
1807	\$7,950,782	1847	\$77,275,949
1808	\$8,415,903	1848	\$81,796,592
1809	\$8,908,233	1849	\$86,581,692
1810	\$9,429,365	1850	\$91,646,721
1811	\$9,980,983	1851	\$97,008,054
1812	\$10,564,870	1852	\$102,683,026
1813	\$11,182,915	1853	\$108,689,983
1814	\$11,837,116	1854	\$115,048,346
1815	\$12,529,587	1855	\$121,778,675
1816	\$13,262,568	1856	\$128,902,727
1817	\$14,038,428	1857	\$136,443,537
1818	\$14,859,676	1858	\$144,425,484
1819	\$15,728,967	1859	\$152,874,374

1860	\$161,817,525	1900	\$1,572,751,288
1861	\$171,283,851	1901	\$1,664,757,238
1862	\$181,303,956	1902	\$1,762,145,537
1863	\$191,910,237	1903	\$1,865,231,051
1864	\$203,136,986	1904	\$1,974,347,067
1865	\$215,020,500	1905	\$2,089,846,371
1866	\$227,599,199	1906	\$2,212,102,383
1867	\$240,913,752	1907	\$2,341,510,373
1868	\$255,007,207	1908	\$2,478,488,730
1869	\$269,925,128	1909	\$2,623,480,320
1870	\$285,715,748	1910	\$2,776,953,919
1871	\$302,430,120	1911	\$2,939,405,723
1872	\$320,122,282	1912	\$3,111,360,958
1873	\$338,849,435	1913	\$3,293,375,574
1874	\$358,672,127	1914	\$3,486,038,045
1875	\$379,654,446	1915	\$3,689,971,271
1876	\$401,864,232	1916	\$3,905,834,590
1877	\$425,373,289	1917	\$4,134,325,914
1878	\$450,257,627	1918	\$4,376,183,980
1879	\$476,597,698	1919	\$4,632,190,743
1880	\$504,478,663	1920	\$4,903,173,901
1881	\$533,990,665	1921	\$5,190,009,574
1882	\$565,229,119	1922	\$5,493,625,134
1883	\$598,295,022	1923	\$5,815,002,205
1884	\$633,295,281	1924	\$6,155,179,834
1885	\$670,343,055	1925	\$6,515,257,854
1886	\$709,558,124	1926	\$6,896,400,438
1887	\$751,067,274	1927	\$7,299,839,864
1888	\$795,004,709	1928	\$7,726,880,496
1889	\$841,512,485	1929	\$8,178,903,005
1890	\$890,740,965	1930	\$8,657,368,831
1891	\$942,849,312	1931	\$9,163,824,908
1892	\$998,005,996	1932	\$9,699,908,665
1893	\$1,056,389,347	1933	\$10,267,353,321
1894	\$1,118,188,124	1934	\$10,867,993,491
1895	\$1,183,602,129	1935	\$11,503,771,110
1896	\$1,252,842,854	1936	\$12,176,741,720
1897	\$1,326,134,161	1937	\$12,889,081,111
1898	\$1,403,713,009	1938	\$13,643,092,356
1899	\$1,485,830,220	1939	\$14,441,213,258

1940	\$15,286,024,234	1979	\$140,358,324,615
1941	\$16,180,256,652	1980	\$148,569,286,605
1942	\$17,126,801,666	1981	\$157,260,589,872
1943	\$18,128,719,563	1982	\$166,460,334,379
1944	\$19,189,249,658	1983	\$176,198,263,940
1945	\$20,311,820,763	1984	\$186,505,862,381
1946	\$21,500,062,277	1985	\$197,416,455,330
1947	\$22,757,815,920	1986	\$208,965,317,967
1948	\$24,089,148,152	1987	\$221,189,789,068
1949	\$25,498,363,319	1988	\$234,129,391,729
1950	\$26,990,017,573	1989	\$247,825,961,145
1951	\$28,568,933,601	1990	\$262,323,779,872
1952	\$30,240,216,216	1991	\$277,669,720,994
1953	\$32,009,268,865	1992	\$293,913,399,672
1954	\$33,881,811,094	1993	\$311,107,333,553
1955	\$35,863,897,043	1994	\$329,307,112,566
1956	\$37,961,935,020	1995	\$348,571,578,651
1957	\$40,182,708,218	1996	\$368,963,016,002
1958	\$42,533,396,649	1997	\$390,547,352,439
1959	\$45,021,600,353	1998	\$413,394,372,556
1960	\$47,655,363,974	1999	\$437,577,943,351
1961	\$50,443,202,766	2000	\$463,176,253,037
1962	\$53,394,130,128	2001	\$490,272,063,839
1963	\$56,517,686,740	2002	\$518,952,979,574
1964	\$59,823,971,415	2003	\$549,311,728,879
1965	\$63,323,673,743	2004	\$581,446,465,018
1966	\$67,028,108,656	2005	\$615,461,083,222
1967	\$70,949,253,013	2006	\$651,465,556,591
1968	\$75,099,784,314	2007	\$689,576,291,651
1969	\$79,493,121,697	2008	\$729,916,504,713
1970	\$84,143,469,316	2009	\$772,616,620,238
1971	\$89,065,862,271	2010	\$817,814,692,522
1972	\$94,276,215,214	2011	\$865,656,852,035
1973	\$99,791,373,804	2012	\$916,297,777,879
1974	\$105,629,169,171	2013	\$969,901,197,885
1975	\$111,808,475,568	2014	\$1,026,640,417,961
1976	\$118,349,271,388	2015	\$1,086,698,882,412
1977	\$125,272,703,764	2016	\$1,150,270,767,033
1978	\$132,601,156,935		

# EFFECTS OF INFLATION WHAT IT TAKES TO BUY WHAT \$1.00 BOUGHT 60 YEARS AT 3% ANNUAL INFLATION

<u>YR.</u>	AMOUNT	YR.	AMOUNT	YR.	AMOUNT
1	\$1.00	21	\$1.81	41	\$3.26
2	\$1.03	22	\$1.86	42	\$3.36
3	\$1.06	23	\$1.92	43	\$3.46
4	\$1.09	24	\$1.97	44	\$3.56
5	\$1.13	25	\$2.03	45	\$3.67
6	\$1.16	26	\$2.09	46	\$3.78
7	\$1.19	27	\$2.16	47	\$3.90
8	\$1.23	28	\$2.22	48	\$4.01
9	\$1.27	29	\$2.29	49	\$4.13
10	\$1.30	30	\$2.36	50	\$4.26
11	\$1.34	31	\$2.43	51	\$4.38
12	\$1.38	32	\$2.50	52	\$4.52
13	\$1.43	33	\$2.58	53	\$4.65
14	\$1.47	34	\$2.65	54	\$4.79
15	\$1.51	35	\$2.73	55	\$4.93
16	\$1.56	36	\$2.81	56	\$5.08
17	\$1.60	37	\$2.90	57	\$5.23
18	\$1.65	38	\$2.99	58	\$5.39
19	\$1.70	39	\$3.07	59	\$5.55
20	\$1.75	40	\$3.17	60	\$5.72

\$5,408 \$95.88 56.40 166.10 \$15,608 \$15,926   \$5,624 \$103.94 54.11 220.22 \$21,232 \$22,889   \$5,849 \$116.03 50.41 270.63 \$27,082 \$31,401   \$6,083 \$96.57 62.99 333.62 \$33,165 \$32,218   \$6,327 \$76.98 82.18 415.81 \$39,491 \$32,009   \$6,580 \$100.86 65.24 481.04 \$46,071 \$48,518   \$6,843 \$102.03 67.07 548.11 \$52,914 \$55,924   \$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 <	ANNUAL	SHARE	SHARES	CUMULATIVE	CUMULATIVE	ACCOUNT
\$5,200 \$85.02 61.16 109.70 \$10,200 \$9,327   \$5,408 \$95.88 56.40 166.10 \$15,608 \$15,926   \$5,624 \$103.94 54.11 220.22 \$21,232 \$22,889   \$5,849 \$116.03 50.41 270.63 \$27,082 \$31,401   \$6,083 \$96.57 62.99 333.62 \$33,165 \$32,218   \$6,327 \$76.98 82.18 415.81 \$39,491 \$32,009   \$6,580 \$100.86 65.24 481.04 \$46,071 \$48,518   \$6,843 \$102.03 67.07 548.11 \$52,914 \$55,924   \$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 \$31.13 \$83,134 \$107,673   \$8,325 \$120.40	INVESTMENT	PRICE	BOUGHT	SHARES	INVESTMENT	VALUE
\$5,408 \$95.88 56.40 166.10 \$15,608 \$15,926   \$5,624 \$103.94 54.11 220.22 \$21,232 \$22,889   \$5,849 \$116.03 50.41 270.63 \$27,082 \$31,401   \$6,083 \$96.57 62.99 333.62 \$33,165 \$32,218   \$6,327 \$76.98 82.18 415.81 \$39,491 \$32,009   \$6,580 \$100.86 65.24 481.04 \$46,071 \$48,518   \$6,843 \$102.03 67.07 548.11 \$52,914 \$55,924   \$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 <	\$5,000	\$103.01	48.54	48.54	\$5,000	\$5,000
\$5,624 \$103.94 54.11 220.22 \$21,232 \$22,889   \$5,849 \$116.03 50.41 270.63 \$27,082 \$31,401   \$6,083 \$96.57 62.99 333.62 \$33,165 \$32,218   \$6,327 \$76.98 82.18 415.81 \$39,491 \$32,009   \$6,580 \$100.86 65.24 481.04 \$46,071 \$48,518   \$6,843 \$102.03 67.07 548.11 \$52,914 \$55,924   \$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$5,200	\$85.02	61.16	109.70	\$10,200	\$9,327
\$5,849 \$116.03 50.41 270.63 \$27,082 \$31,401   \$6,083 \$96.57 62.99 333.62 \$33,165 \$32,218   \$6,327 \$76.98 82.18 415.81 \$39,491 \$32,009   \$6,580 \$100.86 65.24 481.04 \$46,071 \$48,518   \$6,843 \$102.03 67.07 548.11 \$52,914 \$55,924   \$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$5,408	\$95.88	56.40	166.10	\$15,608	\$15,926
\$6,083 \$96.57 62.99 333.62 \$33,165 \$32,218   \$6,327 \$76.98 82.18 415.81 \$39,491 \$32,009   \$6,580 \$100.86 65.24 481.04 \$46,071 \$48,518   \$6,843 \$102.03 67.07 548.11 \$52,914 \$55,924   \$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$5,624	\$103.94	54.11	220.22	\$21,232	\$22,889
\$6,327 \$76.98 82.18 415.81 \$39,491 \$32,009   \$6,580 \$100.86 65.24 481.04 \$46,071 \$48,518   \$6,843 \$102.03 67.07 548.11 \$52,914 \$55,924   \$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$5,849	\$116.03	50.41	270.63	\$27,082	\$31,401
\$6,580 \$100.86 65.24 481.04 \$46,071 \$48,518   \$6,843 \$102.03 67.07 548.11 \$52,914 \$55,924   \$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$6,083	\$96.57	62.99	333.62	\$33,165	\$32,218
\$6,843 \$102.03 67.07 548.11 \$52,914 \$55,924   \$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$6,327	\$76.98	82.18	415.81	\$39,491	\$32,009
\$7,117 \$89.25 79.74 627.85 \$60,031 \$56,035   \$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$6,580	\$100.86	65.24	481.04	\$46,071	\$48,518
\$7,401 \$99.93 74.06 701.91 \$67,432 \$70,142   \$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$6,843	\$102.03	67.07	548.11	\$52,914	\$55,924
\$7,697 \$114.16 67.43 769.34 \$75,129 \$87,827   \$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673   \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393   \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$7,117	\$89.25	79.74	627.85	\$60,031	\$56,035
\$8,005 \$129.55 61.79 831.13 \$83,134 \$107,673 \$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393 \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$7,401	\$99.93	74.06	701.91	\$67,432	\$70,142
\$8,325 \$120.40 69.15 900.28 \$91,460 \$108,393 \$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$7,697	\$114.16	67.43	769.34	\$75,129	\$87,827
\$8,658 \$145.30 59.59 959.86 \$100,118 \$139,468	\$8,005	\$129.55	61.79	831.13	\$83,134	\$107,673
	\$8,325	\$120.40	69.15	900.28	\$91,460	\$108,393
\$9.005 \$163.41 55.11 1.014.97 \$109.123 \$165.856	\$8,658	\$145.30	59.59	959.86	\$100,118	\$139,468
	\$9,005	\$163.41	55.11	1,014.97	\$109,123	\$165,856
\$9,365 \$179.63 52.13 1,067.10 \$118,488 \$191,684	\$9,365	\$179.63	52.13	1,067.10	\$118,488	\$191,684
\$9,740 \$211.78 45.99 1,113.09 \$128,227 \$235,731	\$9,740	\$211.78	45.99	1,113.09	\$128,227	\$235,731
\$10,129 \$274.08 36.96 1,150.05 \$138,356 \$315,206	\$10,129	\$274.08	36.96	1,150.05	\$138,356	\$315,206
\$10,534 \$257.07 40.98 1,191.03 \$148,890 \$306,178	\$10,534	\$257.07	40.98	1,191.03	\$148,890	\$306,178
\$10,956 \$297.47 36.83 1,227.86 \$159,846 \$365,251	\$10,956	\$297.47	36.83	1,227.86	\$159,846	\$365,251
\$11,394 \$329.08 34.62 1,262.48 \$171,240 \$415,457	\$11,394	\$329.08	34.62	1,262.48	\$171,240	\$415,457
\$11,850 \$343.93 34.45 1,296.93 \$183,089 \$446,055	\$11,850	\$343.93	34.45	1,296.93	\$183,089	\$446,055
\$12,324 \$408.78 30.15 1,327.08 \$195,413 \$542,484	\$12,324	\$408.78	30.15	1,327.08	\$195,413	\$542,484
\$12,817 \$438.78 29.21 1,356.29 \$208,230 \$595,113	\$12,817	\$438.78	29.21	1,356.29	\$208,230	\$595,113
\$13,329 \$481.61 27.68 1,383.97 \$221,559 \$666,532	\$13,329	\$481.61	27.68	1,383.97	\$221,559	\$666,532
\$13,862 \$470.42 29.47 1,413.43 \$235,421 \$664,908	\$13,862	\$470.42	29.47	1,413.43	\$235,421	\$664,908
\$14,417 \$636.02 22.67 1,436.10 \$249,838 \$913,390	\$14,417	\$636.02	22.67	1,436.10	\$249,838	\$913,390
\$14,994 \$786.19 19.07 1,455.17 \$264,831 \$1,144,043	\$14,994	\$786.19	19.07	1,455.17	\$264,831	\$1,144,043
\$15,593 \$980.28 15.91 1,471.08 \$280,425 \$1,442,071	\$15,593	\$980.28	15.91	1,471.08	\$280,425	\$1,442,071
\$16,217 \$1,279.64 12.67 1,483.75 \$296,642 \$1,898,670	\$16,217	\$1,279.64	12.67	1,483.75	\$296,642	\$1,898,670

#### DOLLAR-COST AVERAGING WITH S&P 500 1968-2007

\$16,866	\$1,394.46	12.09	1,495.85	\$313,507	\$2,085,900
\$17,540	\$1,366.01	12.84	1,508.69	\$331,048	\$2,060,884
\$18,242	\$1,130.20	16.14	1,524.83	\$349,290	\$1,723,362
\$18,972	\$855.70	22.17	1,547.00	\$368,261	\$1,323,768
\$19,730	\$1,131.13	17.44	1,564.44	\$387,992	\$1,769,588
\$20,520	\$1,181.27	17.37	1,581.81	\$408,511	\$1,868,549
\$21,340	\$1,280.08	16.67	1,598.49	\$429,852	\$2,046,189
\$22,194	\$1,418.30	15.65	1,614.13	\$452,046	\$2,289,325
\$23,082	\$1,468.23	15.72	1,629.85	\$475,128	\$2,393,001

#### PERSONAL BALANCE SHEET

## Assets

Market Value of Home	\$
Market Value of other Real Estate	\$
Cash, Checking, Savings Accounts, CD's	\$
Investments in retirement accounts (401k, IRA, etc.)	\$
Other Investments (stocks, bonds, etc.)	\$
Cash Value of Life Insurance	\$
Other marketable assets	\$

# TOTAL ASSETS \$_____

# Liabilities

Mortgage Balance on Primary Residence	\$
Other Outstanding Mortgages	\$
Outstanding Balance - All Autos	\$
Outstanding Balance - All Other Secured Loans	\$
Outstanding Balance - All Credit Cards	\$
Unpaid Taxes	\$
All Other Liabilities	\$

TOTAL LIABILITIES \$_____

## NET WORTH (total assets minus total liabilities) \$_____

#### **PERSONAL INCOME STATEMENT**

Household Income				
Gross Annual Salary/Bonus	You \$	Spouse \$		
Monthly Take-Home Pay	You \$	Spouse \$		
Monthly Soc. Sec. / Pension	You \$	Spouse \$		
Other Monthly Income	You \$	Spouse \$		

TOTAL MONTHLY <u>NET</u> INCOME \$_____

Monthly Household Expenses

Mortgage/Rent	\$ Church/Charity	\$
Home Insurance	\$ Medical/Dental (including insurance)	\$
Auto #1 Loan	\$	⊅
Auto #2 Loan	\$ Life Insurance	\$
Auto Insurance	\$ Disability Insurance	\$
Gas/Auto maint.	\$ Other Loans	\$
Day Care	\$ Entertainment	\$
Utilities	\$ Clothing	\$
Food	\$ Other Expenses	\$
Clothing	\$	

TOTAL MONTHLY EXPENSES \$_____

FUTURE VALUE - Money Lessons for Life