

Financial Advice for the Boys: An Introduction to Frugality, Saving, and Investment

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(Edit, January 2022.) Investing Flow Chart: <https://i.imgur.com/lSoUQr2.png>

Abstract

This document aims to provide guidance for a person of any income level seeking financial stability and future prosperity. The model described herein builds on the fundamental principle for achieving wealth: *frugality*. This means taking on little to no debt and paying off any current debt. It means saving as much as possible, often determined by a personal budget. Finally, it means investing those savings so that your earnings aren't eaten away by inflation.

Introduction

While saving for the future can be difficult for individuals with an income below the median¹, retirement and emergency savings are imperative components of a balanced life regardless of a person's salary. Furthermore, some degree of financial flexibility makes virtually all aspects of life better, facilitating a healthy social life, funding travel, and at a certain point, keeping stress away so that we can focus on things we value. With that in mind, a person with low income must keep their eye on the long game at all times. You can pay off large amounts of debt within a few years and begin to save large amounts of money if you adopt the right long term strategy.²

What qualifies me to provide this advice? I must notify you, first and foremost, that I am not a certified financial planner. Financial advice, in general, should be tailored to the individual investor, so while this document may seem to provide "one size fits all" strategy, do not be deceived. The forthcoming advice is merely a framework. However, I think it's a helpful framework.

My investing experience is not professional. However, I do have some personal experience (eg, I have a Roth IRA, a 401(k), a mutual fund, several ETFs, a savings account, and a checking account. I have also purchased a home). I also think about saving a lot. I strategize, I read blogs³,

¹ The median per-capita income in Wisconsin is \$26,624. The median *household* income is \$51,598.

² Anna finished her undergraduate with ~\$25,000 in student loans. Because we split the rent on cheap one bedroom apartments for many years, and because we maintained very low-consumption habits, she paid off her entire loans within 2.5 years on a \$34k-36k salary.

³ <https://www.mrmoneymustache.com/>

I read books⁴, and I cruise reddit⁵ in search of advice. I hope to relay that dispersed knowledge concisely in this text.

I. A Note on Lifestyle

I want to start this document with a note on lifestyle. The fact is, the less money you make, the less you can spend, and it's not easy living beneath your means when your means are paltry. I recall reading in Mr. Money Mustache's blog once, for example, that if you can't afford an emergency fund, you can't afford a car. Through this mindset, I have come to view everything that is not a basic need (food, water, shelter, toiletries) as a luxury good. I allow myself to purchase luxuries like books, or a meal at a restaurant, or a movie in the theater only after I have safely stashed away my monthly retirement savings and medium term savings.

For the boys, this might mean answering the question: "Can I afford to spend \$9 on a six pack this week?" It may also mean answering other unpalatable questions like, "Can I afford to buy this plane ticket, even though I haven't travelled by plane in years?" or "Can I afford to attend this concert my friend is going to?" You easily can judge whether such expenditures make sense by asking questions that we will address in this document. Do you have an emergency fund in place? Have you met your budgetary goals for the month? The fact is, sometimes--and if you're poor, often times--you have to forgo these luxuries.

I am not bringing this up to shame anyone for having fun. I'm talking about it because the simple fact is: saving money requires sacrifice.

However, frugality can also incentivize you to adopt inexpensive habits that don't feel like sacrifices. Do you eat cereal for breakfast? Switch to oatmeal. You'll save several dollars a week, which over the course of the year adds up to hundreds (and over a lifetime, thousands). Do you pay for media, like books and movies? Spend more time at the library. Do you go out on the town with your buddies? Stay in and hang at someone's house instead. Do you travel a lot on the weekends? Find stuff to do in your city. All of these things might seem small, but grouped together, they will literally save you thousands of dollars a year. The Mr. Money Mustache blog is devoted to all the little things that will save you money over time, so if you're looking for ideas, go there.

From my own perspective, I know that I could improve. Anna and I have a weekly tradition of going out for coffee on Sundays to read the New York Times--a habit that costs probably \$5-\$10 per week (\$260-\$520 per year). We also spend a lot on food, because we're always trying recipes that require obscure ingredients that we don't have in the kitchen, and we often shop at the COOP. But certain frugal habits have become ingrained in our lifestyles. Not owning a car saves

⁴ <https://www.amazon.com/Millionaire-Next-Door-Surprising-Americas/dp/1589795474>;

⁵ <https://www.reddit.com/r/personalfinance/>; <https://www.reddit.com/r/financialindependence/>;
<http://reddit.com/r/investing>

us thousands of dollars a year. Exercising at home or by running/biking saves hundreds per year on gym memberships. Refusing to participate in hyper-consumer culture (making our house fancy; having new electronics; wearing fashionable clothing) saves us an untold fortune.

I see frugality as a challenge. I win if I can avoid paying for unnecessary shit. I also win because my wealth grows larger every month that I live as far below my means as possible.

II. Emergency Fund and Health Insurance

Everyone should have at least \$1,000 available for an emergency situation. If you do not have \$1,000 in the bank, that should be priority number one for you. All of your life decisions should be aimed at making this happen. Before you have achieved this goal, you cannot afford *any* luxury goods.

You should have a similar sense of urgency regarding health insurance. If you are over 26 years old, you are responsible for your own health insurance and you should not take a job unless they offer it.

Once you have achieved this most basic level of security, you should grow your savings account until you have 3-4 months-worth of expenses saved. Let's break this concept down in a table:

Rent	\$750.00
Food	\$300.00
Transit	\$100.00
Utilities	\$150.00
Other	\$150.00
Total Monthly Expenses	\$1,450.00

Three Month Savings	\$4,350.00
Four Month Savings	\$5,800.00

This is how much money, at a minimum, you should keep in your savings/checking account. Consider this your baseline. Once you have this, you can open yourself up into the world of more luxury goods and graduate to medium term investing.

III. Debt

Let's talk about interest. Interest accrues monthly in savings accounts, certificates of deposit, and bonds. It also accrues on debt. If you are accruing interest in the first category, you are winning. If you are accruing interest on debt, you are losing. And you're losing way harder than you could ever win.

Savings accounts will likely give you an interest rate of less than 1% per year. This is a bad interest rate--virtually nothing. It does not even keep up with the annual ~2% inflation rate. Certificates of Deposit (CDs) might give you something as high as 3% in today's market. This is better, but still not great, given that you cannot access money in a CD for a set period of time. Bond rates can vary depending on the bond.

In contrast, banks and credit card companies get a very good interest rate from their clients. Currently, mortgage rates hover around 4%. Student loan debt can vary between 5% and 10%. Credit card debt can be above 20%. The world works this way because banks and credit card companies have the money and power to command these rates. If you have debt above ~7% interest rate, there is virtually no way you can out-invest the bank (I'll come back to this point with further explanation).

Let's watch what this means for a case in which someone owes \$10,000 at a rate of 20%, paying off \$500 per month:

	Month	Amount Owed	Interest Paid
Year 1	1	\$9,500.00	0
	2	\$9,157.70	\$157.70
	3	\$8,809.72	\$309.72
	4	\$8,455.96	\$455.96
	5	\$8,096.33	\$596.33
	6	\$7,730.73	\$730.73
	7	\$7,359.06	\$859.06
	8	\$6,981.22	\$981.22
	9	\$6,597.11	\$1,097.11
	10	\$6,206.62	\$1,206.62
	11	\$5,809.65	\$1,309.65
	12	\$5,406.09	\$1,406.09
Year 2	1	\$4,995.83	\$1,495.83
	2	\$4,578.76	\$1,578.76
	3	\$4,154.77	\$1,654.77
	4	\$3,723.74	\$1,723.74
	5	\$3,285.55	\$1,785.55
	6	\$2,840.09	\$1,840.09
	7	\$2,387.24	\$1,887.24
	8	\$1,926.86	\$1,926.86
	9	\$1,458.85	\$1,958.85
	10	\$983.07	\$1,983.07
	11	\$499.39	\$1,999.39
	12	\$7.68	\$2,007.68

In the end, you have paid an additional \$2,007 dollars for whatever you bought. The longer you take to pay the debt, the higher that number climbs. If it takes you five years, you'll end up paying nearly \$6,000 in interest.⁶

So what does this mean? It means you should pay off your debt as soon as possible. That means forgoing luxury goods until you are free of debt. Otherwise, with each passing month, you're giving money away.

I should mention a caveat, however. Some debt, like a mortgage, may have a lower interest rate than what you can expect from the stock market. Say you have a mortgage rate of 4%. On average, the real rate of return on the SP500 is ~7%. This means that if you own a diversified mutual fund, over a long period of time you can expect to grow your wealth faster than you're spending it on your mortgage. Three percent faster, to be precise.⁷

IV. Retirement

When I started at Christensen Associates in 2016, my dad called me and asked if I had started a retirement fund. I proudly told him, yes, and the company matches 3% of my savings.

"So how much are you putting away?" he asked.

"Three percent," I said. I chose three percent because that, plus the company's contribution, totalled to 6%, which seemed sufficient to me.

To my surprise, my dad responded with a beat of silence. Then, he said, "Well...That's good. It's good to be saving something. But you should work on getting it into the double digits. Something like 12%-15%."

That was a surprise to me. Here I thought I was way ahead of the curve, and yet I was far behind where I should be. Since that conversation, I've done some research and corroborated that yes, you want to be in the double digits for your retirement fund.

So what does this all mean? It means that, in an ideal world, something like 15% of your paycheck should get whisked away before you have the chance to see it, until you're 65 years old. After an emergency fund and paying off debt, retirement is the third step in a financially secure life, and you should prioritize double digit retirement savings (as a percentage of income) ahead of medium term savings.

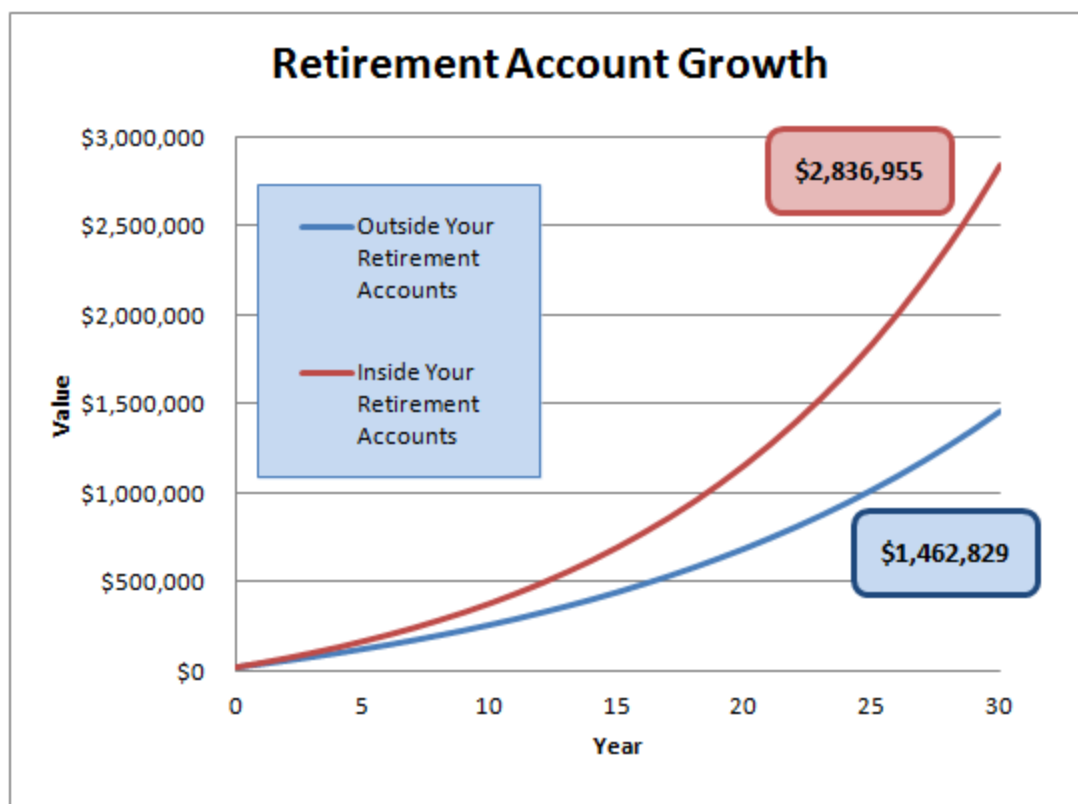
⁶ Even at the "low" interest rate of a mortgage, this fact hurts. Over 30 years at 4% interest, you will pay an additional \$115,000 on a \$160,000 loan. In other words, your \$200,000 house actually cost you \$315,000.

⁷ See Appendix A for more discussion.

You can do this in two ways. First, through a 401(k), which your employer may offer as a benefit. A 401(k) will automatically remove money from your paycheck and put it into an index fund through a company like Vanguard or Fidelity Investments. If you have an hourly-wage job, you may not have the opportunity to receive this benefit.

The other way to save for retirement is through an IRA, or a Roth-IRA.⁸ A Roth IRA allows a maximum annual contribution of \$6,500, and has no minimum balance requirement to begin. To start your own Roth IRA, follow this link: <https://investor.vanguard.com/ira/iras> and let me know if you have further questions.

Using a tax-incentivized means of retirement can save you hundreds of thousands of dollars in the long run. If you have spare money to put away, strongly consider putting it toward an IRA or 401(k) rather than a regular mutual fund. See the graph below for an example investment plan, which compares the returns on retirement accounts against non-tax-incentivized investing.



⁸ Traditional IRA contributions are tax-deductible on both state and federal tax returns for the year you make the contribution; withdrawals in retirement are taxed at ordinary income tax rates. Roth IRAs provide no tax break for contributions, but earnings and withdrawals are generally tax-free.

Guys. You do not want to be living in poverty when you're old and sick. Many of us claim we're not planning on having children. If you're 75 without children and you have no money, you are going to be screwed. Simple as that.

V. Medium Term Savings

Ahh, the good life. You've made yourself secure enough that you can begin saving for a house or for the cancer you'll inevitably get someday. Let's take stock of where you're at:

Emergency Fund	\$4,000+
Non-Mortgage Debt	\$0.00
Retirement	10%+ of paycheck

You have enough to weather an emergency (for example, you lose your job). You've got no debt eating away at your earnings. You're on the road to a retirement without poverty. Now what?

Now you should begin investing. Specifically, you should select an index fund from a company like Vanguard, and put a portion of your monthly budget into that fund. If you've got a couple hundred extra dollars--or even less--lying around after covering your monthly expenses and you want to save for a house, you can't be buying luxury goods. You need to be saving that. It might mean you can't make it to some wedding on the East Coast for a distant relative. C'est la vie. We all need to make sacrifices in this slowly dying country. Here are the steps you must take:

1. Unfortunately, many mutual funds require you to start with something like \$3,000. You can save up this sum of money in addition to your emergency savings, and then invest in a mutual fund. If you have a very low income, this will take some time. But don't panic. If you can put just a few dozen dollars away with each paycheck, in a few years you'll have this sum. You have to be diligent and aware, every time the opportunity to spend arises.
2. Once you have this sum, go to Vanguard and select a fund based on your appetite for risk. A mutual fund with more stocks than bonds is considered riskier, because bonds payout with higher precedence than stocks. A stocks-only fund will fluctuate more dramatically as the market responds to daily news. Bond markets often respond in the opposite direction. The age-old mantra goes: "higher risk, higher reward". Stocks have higher potential to grow faster.
3. Continue to put your extra dollars in this fund every month. Over time, it will grow large enough that you can move on to the final stage of financial stability: long term wealth.

[Update] **You do not need to wait to save up for the minimum investment sum required to open a mutual fund.** Mutual funds are just one investment instrument. Exchange-traded funds (ETFs) also give you exposure to the stock market in much the same way. ETFs are bundled stock (or bond, or mixed) funds that consist of some pre-determined mix of stocks and are sold as shares, much like an individual stock. This means that you can invest in

diversified bundles of stocks for as little as \$100/share. The advantage here is that you're not picking a stock, which is very risky. Instead, you're betting on the market as a whole, or some fraction of the market (say, "healthcare" or "technology"). Some popular ETF tickers include: VTI (Vanguard Total Stock ETF), VGT (Vanguard Information Technology), SPY (S&P 500 Index).

VI. Growing Long Term Wealth

This is a stage that many individuals never reach. For the middle class, long term wealth has often translated into purchasing a home, so that is what I will talk about here. Why does home ownership rank first among the means of acquiring long term wealth? First, it's a protection against rising rent prices.⁹ Second, it's an asset that will tend to appreciate in value. Third, it provides you with a store of wealth while simultaneously providing you with housing. Fourth, it's an extra means of diversifying your wealth.

Let's take stock of where you're at:

Emergency Fund	\$4,000+
Non-Mortgage Debt	\$0.00
Medium Term Savings	\$15,000+
Retirement	10%+ of paycheck

Ideally, you have a partner in a similar situation. Pooled together, you'll have a total medium term savings of \$30,000 or more. While this may sound like a lot of money, it's only enough to purchase a \$150,000 home if you don't want to pay mortgage insurance. This might seem far away. If you're wondering where you stand in terms of other Americans, or where you should be at your age, keep in mind that the average age of a first time home buyer in the United States is 33 years old. Furthermore, 35% of first time home buyers are over 37 years old. And at the end of the day, only 56% of Americans own their home, so if you feel as though this is a long way off, you're not alone.¹⁰

To purchase a home, you need enough money to pay 20% of the value of the house. However, you can purchase a home with significantly less money down if you purchase mortgage insurance. This is an extra monthly payment that provides the bank with security if you miss payments. Generally speaking, what this really means is: you're giving away money when you don't need to. Try to save up that 20%.

When selecting a home, always choose something within your budget. Don't reach for property that may put you at risk of being unable to make payments. If you fail to make payments to the

⁹ In fact, my mortgage for a 2 bedroom, 2 bathroom house is \$100 less than the rent for my 1 bedroom apartment just down the street.

¹⁰ See some other interesting statistics here:

<https://www.nytimes.com/2017/04/21/realestate/first-time-home-buyers-statistics.html>

bank, you could find yourself in a situation where all the wealth you've worked so hard to accumulate disappears. Remember that your monthly payment will include a loan payment to the bank, a contribution to your property taxes, and an homeowners insurance payment. Here is how my monthly statement breaks down, roughly:

Loan Payment	\$700
Property Tax	\$400
Homeowners Insurance	\$40
Total	\$1,140

Yes, a large percentage of your payment is to taxes and insurance, but if you weren't paying it as a homeowner, you'd be paying it through rent as a renter anyway.

Once you've made it to this point, you can finally begin to enjoy luxury goods. Go out for that beer, you've earned it! Pick up a copy of *You're Fifty, Now What?* and spread out that beach towel. You've finally made it to the American Dream.

Conclusion

This document takes you on a journey from starting an emergency savings fund to owning a home. This journey may take a decade or more, depending on your income and savings rate. As you ratchet up each level, you should always continue the savings practices you developed in the previous level. For example, don't go spending your emergency fund just because you've paid off your debt. Don't take on more debt just because you've got a retirement fund started. Diligently work to keep personal costs as low as possible all the way through.

Appendix A: The Stock Market vs. Mortgage

Let's say you have such good fortune that you can pay off the outstanding principal on your mortgage (say, \$150,000) after only five years. Should you? Well, if you don't, you'll end up paying an additional \$84,000 in interest on the loan over the next 25 years. That's a lot of money you could save yourself, if you pay it off right now!

But let's not be hasty, hobbits. What else could you do with that chunk of \$150,000, besides pay off your loan? Setting \$150,000 in the SP500 then forgetting about it for 25 years should, given the historical average real rate of return of 7%, become \$412,500. Wow.

What does that mean? It means over that 25 years you lose \$84,000 on your mortgage, but you gain \$262,500 in the market, netting you \$178,500. This exercise shows that sometimes you *can* beat the bank. But only when the interest rate on debt is lower than the interest rate on your investments. This typically only exists with respect to mortgages.

Appendix B: Obtaining a Higher Savings Rate

Saving money means maximizing the *income minus expenses* equation. I want to briefly talk about how to maximize income and minimize expenses.

Income: You are unlikely to strike gold in the globalized economy. Most businesses do not make very much money,¹¹ and quitting a salaried job to start one is very risky. This means if you want a sure way to increase your salary, you must become a desirable employee for the bourgeoisie to exploit. This path is well known:

1. Attend a good school, study a lucrative field¹², and get good grades.
2. Take jobs that position you for career growth.

This may also mean attending graduate school. A master's degree will likely give your career earnings a major boost.¹³ If you care about money, you can go to business school with any undergraduate degree and make a lot of it.

Expenses: The best way to cut down expenses is to have a life partner. It means half rent (this saves me \$6,600 per year; \$66,000 per decade); it means half utilities; it means you can pool your savings for big purchases like a house. Obviously, you don't want to take this step too

¹¹ 29% of businesses in the US make less than \$10,000 per year. (see here:

<https://www.businessknowhow.com/money/earn.htm>)

¹² See a breakdown of median salary by major here:

http://online.wsj.com/public/resources/documents/info-Degrees_that_Pay_you_Back-sort.html

¹³ See comparison of Bachelors vs Masters earners here:

<https://www.goodcall.com/news/how-much-more-can-you-make-with-a-masters-degree-01529>

clinically or hastily. You're talking about a major part of your life, intertwined with emotion and friendship. But it's good to know the financial benefits.

Other than that, saving is about thinking in the long term. Take, for example, saving money by quitting drugs/alcohol. If you forgo spending \$12 per week on beer, in five years that's \$3,120; if you forgo buying an 1/8 of weed with every paycheck, that's \$6,500 over five years. Add those together and you're dumping nearly \$20,000 down the drain every decade. Think back to where you were 10 years ago, and imagine that you made a simple health-conscious choice that also gave you \$20,000 today. You can apply this same principle to other cost-saving techniques and discover ways to save vast sums of money over long periods of time. Think long term.

Finally, I'll just say that I save a lot by making my hobbies free. I bought a piano and running shoes, but now playing music and exercising are free for the long term. I read books for fun, which are free at the library. I enjoy making food, which I need to buy whether I spend time on it or not. High-expense hobbies like music production, video games, climbing, or anything that requires "gear" will hurt your bank account.

Appendix C: Your Ideal Net Worth

Over Fifty Years Old--The boys can ignore this

The author of the book *The Millionaire Next Door*, Thomas Stanley¹⁴, suggests the following formula for determining what your net worth should be:

$$\text{Ideal Net Worth} = (\text{age} * \text{current annual income}) / 10$$

This means that if you are 50 years old and you make \$50,000 per year, your net worth (including retirement and home equity) should be \$250,000. If your actual net worth is lower than your ideal net worth, Stanley would categorize you as an "under accumulator of wealth". It means you need to cut costs and live more cheaply.

Under 35 Years Old

I found a website that adjust Stanley's net worth formula for people who are much earlier in their career.

$$\text{Ideal Net Worth} = ((\text{age} - 25)) * \text{current annual income} / 5$$

This means that if you are 30 years old and you make \$30,000 per year, your net worth (including retirement and home equity) should be \$30,000. If your actual net worth is lower

¹⁴ https://en.wikipedia.org/wiki/The_Millionaire_Next_Door

than your ideal net worth, Stanley would categorize you as an “under-accumulator of wealth”. It means you need to cut costs and live more cheaply.