

Savings Rate - The Most Important Variable to Wealth Building, With the Math to Prove it

When it comes to wealth building, there are many variables to consider: the power of **compounding** is amazing, but it takes a long time to realize its true power. Income **earning** is certainly important, and so is its sister, **annual income growth**. **Taxes** paid matter. **Time** in the market is important, too, of course. Investment **returns**, which are the glittery objects that many people focus lots of energy on, do matter, despite the fact that you have absolutely no control over them. And then there's **how much you save**. But which variable matters *most*? As I have stated in my monthly financial reports many times, it's the **rate of savings** that doesn't get the attention it deserves. This is especially true in the short run, and when you are trying to accumulate wealth as quickly as possible (20 years or less).

Overall, what are the variables that impact your ability to build wealth?

For me, there are six KEY variables that drive wealth creation:

1. Annual Income (how much you earn)
2. Annual Income Growth (at what rate your income increases every year)
3. Effective Tax Rates (what portion of your income goes to taxes)
4. Savings Rate (what is left over after taxes and spending)
5. Duration (the number of years your money is put to work)
6. Compound Annual Growth Rate, or CAGR (how much your money is growing every year, also know as returns)

It's not how much money you make, but how much money you keep, how hard it works for you, and how many generations you keep it for. -Robert Kiyosaki

For the most part, I think this quote by Robert Kiyosaki captures the wealth building process. Let's break what he says down into bite-sized pieces...

“It’s not how much money you make”

It doesn’t matter whether you earn \$30K a year or \$300K a year if you spend every last cent of it. Without saving and investing you will never be wealthy. The reality is that there are plenty of high earners living paycheck to paycheck. The person earning a \$300K salary may appear “rich,” but if he or she is spending all of it every month, it’s just a facade, a veneer of wealth. You must spend less than you make in order to have capital available to grow wealth.

Financial rule #1 is to spend less than you make!

“It’s how much you keep”

Remember the old saying “pay yourself first?” You do this by making sure that every time money comes your way you direct some to saving and some to investing before anything else. If you work for an employer and are offered a 401K or HSA, take advantage of it, as this is a way to pay yourself before Uncle Sam takes his cut. And save enough to get any employer match – that’s free money!

Financial rule #2 is to invest the difference wisely!

In optimizing how much you keep there are really three factors at play:

1. **Your Taxes** – try to do anything and everything to ensure you are paying the minimum taxes legally allowed.
2. **Your Spending** – remember rule #1, and spend less than you make.
3. **Your Savings Rate** – This is what is left after taxes and spending. Surplus goes to either your savings account or investment account. This is where rule #2 comes into play, so make sure you invest the difference wisely. The lottery is not an investment! Well, maybe it is, but it’s not a very wise one.

“How hard it works for you...”

This is really just emphasizing rule #2 to invest the difference wisely. You want to put your little greenbacks to work for you. Start thinking about every dollar you save/invest as a soldier in your army. This is war, and you’re fighting for freedom: financial freedom, time freedom, and location freedom.

You want to put your money where it can appreciate and/or earn you cash flow (i.e.

more income). It's the best of both worlds when you can invest in an asset that does both.

Financial rule #3 is invest wisely so you don't lose money!

“How many generations you keep it for...”

Duration is the key factor that determines the power of your compound annual growth rate (CAGR). The longer your money can stay invested, the more impact the compound rate will have in building your wealth.

Over the long term, it is compounding that will enable you to retire with wealth. Over the very long term, compounding makes it possible to leave a legacy long after you pass away for generations to come. But it takes decades!

Financial rule #4 is to leave your investments to work for the greatest amount of time possible!

Beyond the basics: why your savings rate matters most (and the math to prove it)

For some of you, the above might have been a review. For others, maybe breaking down the wealth building process into bite-sized pieces was enlightening. Either way, we can all benefit from a reminder of how wealth is created.

The review is our solid foundation. To drive home which of these six factors wields the most power, I'm going to use math and a few examples of different types of wealth builders.

Four Different Wealth Builders

- **GYFG** - Saves 50% of his income and would be considered an aggressive saver.
- **Steve** - Saves 5% of his income and would be considered the average American.
- **Adam** - Saves 10% of his income, which many financial planners tout as the sure path to wealth by age 65.
- **Sally** - Saves 15% of her income, somewhere in the middle of the pack.

We are going to walk through several different scenarios. Four assumptions will be held as constant:

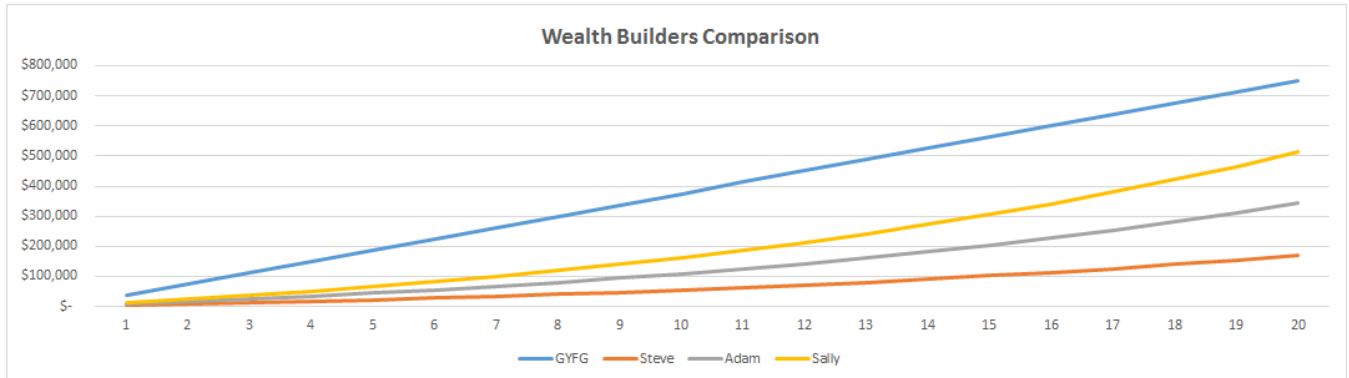
1. Taxes will be assumed at 25%.
2. Duration will be 20 years.
3. The wealth builders' savings rate defined above will stay the same in all scenarios.
4. Steve, Adam, and Sally are assumed to earn the historical market return of 8%.
5. The only assumption that will change in each scenario will be the assumed growth rate that GYFG earns.

Chart porn ahead! Any Excel nerds besides me in the house? Of course there are unlimited permutations to this, but hey...it's my blog! I chose the assumptions I did to keep this exercise on point.

Scenario #1: Static Income and 0% CAGR for our Super Saver GYFG

Static Income Scenario							Year 1	Year 5	Year 10	Year 15	Year 20
GYFG	Aggressive Saver, Low CAGR	\$ 100,000	25%	\$ 75,000	50%	0%	\$ 37,500	\$ 187,500	\$ 375,000	\$ 562,500	\$ 750,000
Steve	Average Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	5%	8%	\$ 3,750	\$ 22,000	\$ 54,325	\$ 101,820	\$ 171,607
						Variance	\$ 33,750	\$ 165,500	\$ 320,675	\$ 460,680	\$ 578,393
GYFG	Aggressive Saver, Low CAGR	\$ 100,000	25%	\$ 75,000	50%	0%	\$ 37,500	\$ 187,500	\$ 375,000	\$ 562,500	\$ 750,000
Adam	2X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	10%	8%	\$ 7,500	\$ 44,000	\$ 108,649	\$ 203,641	\$ 343,215
						Variance	\$ 30,000	\$ 143,500	\$ 266,351	\$ 358,859	\$ 406,785
GYFG	Aggressive Saver, Low CAGR	\$ 100,000	25%	\$ 75,000	50%	0%	\$ 37,500	\$ 187,500	\$ 375,000	\$ 562,500	\$ 750,000
Sally	3X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	15%	8%	\$ 11,250	\$ 65,999	\$ 162,974	\$ 305,461	\$ 514,822
						Variance	\$ 26,250	\$ 121,501	\$ 212,026	\$ 257,039	\$ 235,178
Market Returns Needed to Catch Up											
Steve	Average Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	5%	21%	\$ 3,750	\$ 28,219	\$ 100,117	\$ 283,296	\$ 750,000
Adam	2X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	10%	15%	\$ 7,500	\$ 50,364	\$ 150,770	\$ 350,941	\$ 750,000
Sally	3X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	15%	11%	\$ 11,250	\$ 70,521	\$ 191,116	\$ 397,341	\$ 750,000

In this scenario, we assume that GYFG earns a compound annual growth rate (CAGR) of **ZERO**. A 0% CAGR is extremely unlikely, but this really isolates the importance of savings rate by itself. Notice how in all cases, even after earning 0%, GYFG is able to accumulate more wealth than all of the other wealth builders.



Over the 20 year period, GYFG was able to save \$750K. In the green highlighted section (table above) I have provided what the returns would need to be in order for the other wealth builders to keep pace with GYFG, given their respective savings rates.

- Steve would need to earn a CAGR of 21%.
- Adam would need to earn a CAGR of 15%.
- Sally would need to earn a CAGR of 11%.

I don't know anyone who has consistently earned these kinds of returns, outside of the world's best investors (hello Warren Buffett). Mere mortals like me (and you) should definitely not count on earning those returns.

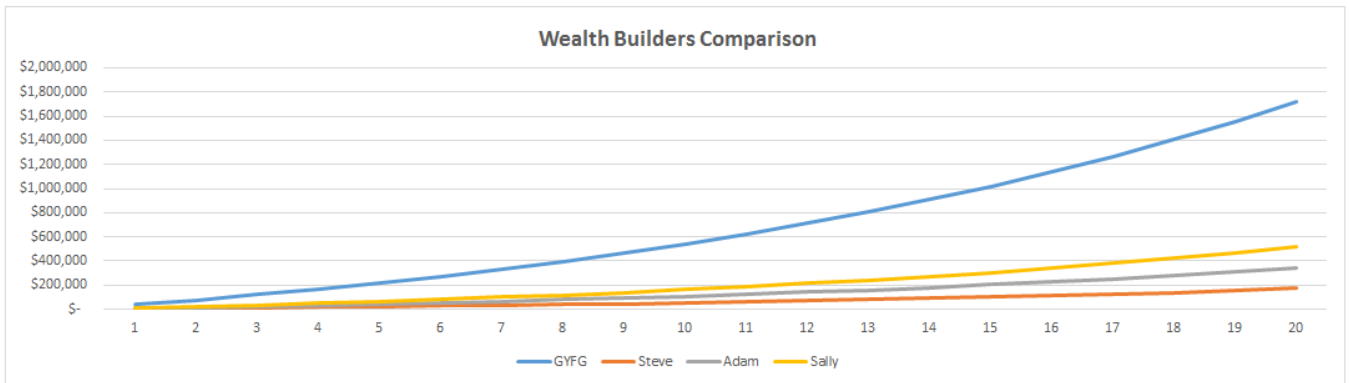
Let's take a look and see what happens when GYFG also earns the historical market return of 8% like the other three.

Scenario #2: Static Income for All, and 8% CAGR for All

Static Income Scenario

Wealth Builder	Description	Gross Income	Tax %	Net Income	Savings %	CAGR %	Year 1	Year 5	Year 10	Year 15	Year 20
GYFG	Aggressive Saver, Low CAGR	\$ 100,000	25%	\$ 75,000	50%	8%	\$ 37,500	\$ 219,998	\$ 543,246	\$ 1,018,204	\$ 1,716,074
Steve	Average Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	5%	8%	\$ 3,750	\$ 22,000	\$ 54,325	\$ 101,820	\$ 171,607
						Variance	\$ 33,750	\$ 197,998	\$ 488,921	\$ 916,384	\$ 1,544,466
GYFG	Aggressive Saver, Low CAGR	\$ 100,000	25%	\$ 75,000	50%	8%	\$ 37,500	\$ 219,998	\$ 543,246	\$ 1,018,204	\$ 1,716,074
Adam	2X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	10%	8%	\$ 7,500	\$ 44,000	\$ 108,649	\$ 203,641	\$ 343,215
						Variance	\$ 30,000	\$ 175,998	\$ 434,597	\$ 814,563	\$ 1,372,859
GYFG	Aggressive Saver, Low CAGR	\$ 100,000	25%	\$ 75,000	50%	8%	\$ 37,500	\$ 219,998	\$ 543,246	\$ 1,018,204	\$ 1,716,074
Sally	3X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	15%	8%	\$ 11,250	\$ 65,999	\$ 162,974	\$ 305,461	\$ 514,822
						Variance	\$ 26,250	\$ 153,998	\$ 380,272	\$ 712,743	\$ 1,201,252
Market Returns Needed to Catch Up											
Steve	Average Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	5%	27%	\$ 3,750	\$ 32,227	\$ 140,251	\$ 502,346	\$ 1,716,074
Adam	2X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	10%	22%	\$ 7,500	\$ 57,680	\$ 211,516	\$ 621,806	\$ 1,716,074
Sally	3X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	15%	18%	\$ 11,250	\$ 81,007	\$ 268,924	\$ 704,845	\$ 1,716,074

Here, GYFG earns the historical market return of compound annual growth rate of 8%, like that of his fellow wealth builders. GYFG accumulates MUCH more wealth than all of the other wealth builders. **The variance TRIPLES when you combine GYFG's 50% savings rate with the average market return (compare chart below to one above).**



Over the 20 year period, GYFG was able to save \$1.7M. In the green highlighted section (table above) I have provided what the returns would need to be in order for the other wealth builders to keep pace with GYFG, given their respective savings rates.

- Steve would need to earn a CAGR of 27%.
- Adam would need to earn a CAGR of 22%.
- Sally would need to earn a CAGR of 18%.

Even less likely. I would not be willing to bet I could earn those kinds of

returns, and neither should you. That's called gambling, not investing, and the house always wins at that game.

Let's take a look at another scenario, but this time assume that each wealth builder is able to increase their income 10% a year.

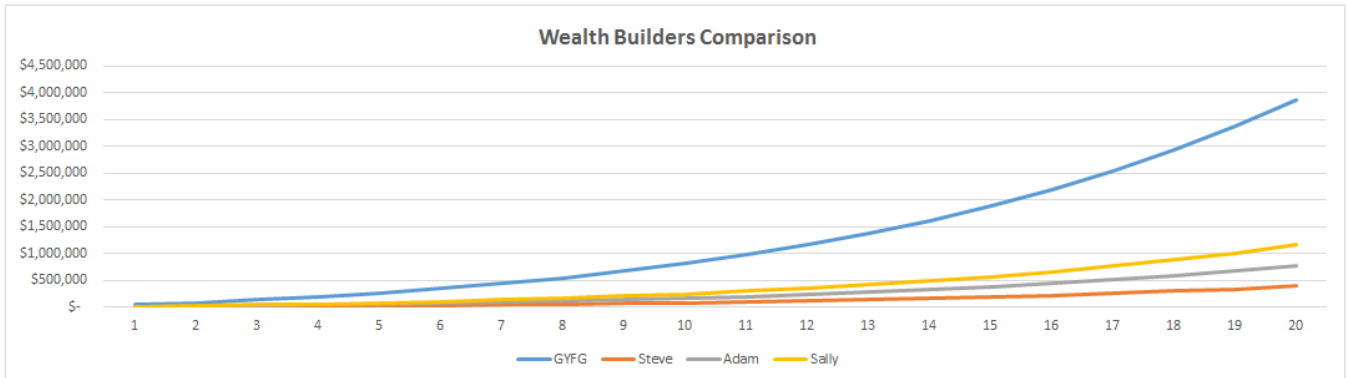
Scenario #3: Static Income and 8% CAGR for Super Saver GYFG. 10% Annual Growth in All Wealth Builders' Income

Note: Although the table below shows the same \$100,000 gross income, due to screen real estate, I'm not showing you the year over year growth in income due to the 10% annual increase. Just note that this is the income in Year 1. Then in Year 2, it increases to \$110,000 and so on from there. You can see all the detail by downloading the model below.

Income Growth of 10%/year Scenario

Wealth Builder	Description	Gross Income	Tax %	Net Income	Savings %	CAGR %	Year 1	Year 5	Year 10	Year 15	Year 20
GYFG	Aggressive Saver, Low CAGR	\$ 100,000	25%	\$ 75,000	50%	8%	\$ 37,500	\$ 264,716	\$ 815,283	\$ 1,884,523	\$ 3,874,768
Steve	Average Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	5%	8%	\$ 3,750	\$ 26,472	\$ 81,528	\$ 188,452	\$ 387,477
						Variance	\$ 33,750	\$ 238,244	\$ 733,754	\$ 1,696,071	\$ 3,487,291
GYFG	Aggressive Saver, Low CAGR	\$ 100,000	25%	\$ 75,000	50%	8%	\$ 37,500	\$ 264,716	\$ 815,283	\$ 1,884,523	\$ 3,874,768
Adam	2X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	10%	8%	\$ 7,500	\$ 52,943	\$ 163,057	\$ 376,905	\$ 774,954
						Variance	\$ 30,000	\$ 211,773	\$ 652,226	\$ 1,507,619	\$ 3,099,814
GYFG	Aggressive Saver, Low CAGR	\$ 100,000	25%	\$ 75,000	50%	8%	\$ 37,500	\$ 264,716	\$ 815,283	\$ 1,884,523	\$ 3,874,768
Sally	3X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	15%	8%	\$ 11,250	\$ 79,415	\$ 244,585	\$ 565,357	\$ 1,162,430
						Variance	\$ 26,250	\$ 185,301	\$ 570,698	\$ 1,319,166	\$ 2,712,337
Market Returns Needed to Catch Up											
Steve	Average Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	5%	31%	\$ 3,750	\$ 40,199	\$ 220,374	\$ 957,457	\$ 3,874,768
Adam	2X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	10%	25%	\$ 7,500	\$ 71,675	\$ 331,561	\$ 1,185,698	\$ 3,874,768
Sally	3X Avg Saver, Avg. CAGR	\$ 100,000	25%	\$ 75,000	15%	21%	\$ 11,250	\$ 100,260	\$ 419,766	\$ 1,341,470	\$ 3,874,768

Holy cow!!! Look at the gap explode when you add a little fuel power in the way of income growth to the mix.



Over the 20 year period, GYFG was able to save \$3.9M. What would the returns need to be in order for the other wealth builders to keep pace with GYFG, given their respective savings rates?

- Steve would need to earn a CAGR of 31%.
- Adam would need to earn a CAGR of 25%.
- Sally would need to earn a CAGR of 21%.

These returns are out of reach to 99.99% of the population. I guess they're possible if you build a business that does really well. But *possible* is not *probable*, and I'd classify these as Pie in the Sky returns, nearly impossible.

You may be asking yourself why I threw in the income growth...great question. Behind maximum savings, [growth of your income](#) is priority #2 when it comes to wealth building. It will allow you to continue to increase your savings. This is where you need your hustle. You may not start out [saving 50% of your income](#), but as you continue to grow your income you will be able to increase your savings rate, and get there rapidly, as long as you keep your lifestyle inflation under control. By growing his income 10% a year, GYFG was able to build a net worth of \$3.9M vs. the \$1.7M built with a static income (that's 2.3X more wealth).

The Big Fat Take Away

A lot of variables will affect your wealth building. But instead of getting overwhelmed by the lot of them, focus on one thing at a time, and make it the most important thing.

In case you missed it...

A HIGH SAVINGS RATE MAKES A HUGE DIFFERENCE IN YOUR ABILITY TO BUILD WEALTH QUICKLY!!!

This is THE most important variable for you to focus on when building your own wealth. The good news is that it is the variable over which you have the most control. In a way, it's like dieting and exercising to lose weight: it is much easier to cut 100 calories from your daily diet than it is to work off 100 calories. It's not that exercise is unimportant, but people who are successful losing weight know to leverage their efforts where it counts the most: eating fewer calories. Similarly, it takes infinitely more work (and offers drastically lower probability of success) to chase high returns than it does to simply laser-focus on increasing savings rate!

In case all the prior tables and charts were not enough, I created one last table for you. It simply summarizes the magnitude of the gap between the four wealth builders I presented you with today. It covers the full spectrum from 0% to 8% market returns.

Static Income	GYFG 0%	GYFG 3%	GYFG 5%	GYFG 8%
Steve	4.4X	5.9X	7.2X	10.0X
Adam	2.2X	2.9X	3.6X	5.0X
Sally	1.5X	2.0X	2.4X	3.3X

Income +10%/Yr	GYFG 0%	GYFG 3%	GYFG 5%	GYFG 8%
Steve	5.5X	6.8X	7.9X	10.0X
Adam	2.8X	3.4X	3.9X	5.0X
Sally	1.8X	2.3X	2.6X	3.3X

- Against **Steve**, GYFG is able to accumulate 4.4X to 10.0X more wealth (Steve saves 5% of his income).
- Against **Adam**, GYFG is able to accumulate 2.2X to 5.0X more wealth (Adam saves 10% of his income).
- And against **Sally**, GYFG is able to accumulate 1.5X to 3.3X more wealth (Sally saves 15% of her income).

Your compound annual growth rate (CAGR) is the *last* variable for you to care about when building wealth. It matters, but not as much as you think, not as much as you

might read about, and especially not as much as the power of a high savings rate.

LAST TIME, IN RED, LET'S ALL SAY IT TOGETHER NOW: IF YOU WANT TO REACH FINANCIAL FREEDOM IN 20 YEARS OR LESS, FOCUS ON INCREASING YOUR SAVINGS RATE.

Are you convinced? Have you been focusing on the wrong metrics? What is your highest priority in your own approach to wealth building?

- Gen Y Finance Guy

p.s. if you want a copy of the data set you can download it here >> [Click Here](#)

p.s.s if you want to see this taken a bit further, go and check out [this post](#) from Go Curry Cracker!



Gen Y Finance Guy

Hey, I'm Dom - the man behind the cartoon. You'll notice that I sign off as "Gen Y Finance Guy" on all my posts, due to the fact that I write this blog anonymously (at least for now). I like to think of myself as the *Chief Freedom Officer* here of my little corner of the internet. In the real world, I'm a 30-something former C-Suite executive turned entrepreneur turned capital allocator. I am trying to humanize finance by sharing my own journey to Financial Freedom. I believe in total *honesty* and *transparency*. That is why before I ever started blogging, I decided that I would share all of my own [financial stats](#). I do this not to brag, but instead to inspire motivate, and also to hold myself accountable. My goal is to be a beacon of hope, motivation, and inspiration for *you*, the reader, by living life by example and sharing it **all** here on the blog. My sincere hope is that you will be able to learn from me - both from my successes and my failures! [Read More](#)