KENNESAW STATE UNIVERSITY
COLES COLLEGE OF BUSINESS
Bagwell Center for the Study of Markets and Economic Opportunity

FLIP FEATURE

Reverse Engineering Your Real Retirement Costs

By Thomas M. Garr

Summer 2025

Reverse Engineering Your Real Retirement Costs

Prof. Thomas M. Garr

Much has been written about how to save for retirement. Different investment strategies, managing risk versus investment gains, type of diversified portfolios, personal risk profile, and so on. I think that everyone will agree that the key is the end game when you reach retirement. That is the point later in life when you are either not able to work full-time or want to do something that produces less income than you could make in your regular working lifetime. The objective of the game is Freedom. Not only Religious Freedom, or Freedom of Speech or the Freedom that good health provides, but the key to all of this is Financial Freedom. When most people think of retirement they look at all their household expenses and try to think how much they will need when they retire if they no longer have a job. At that point, they either have enough or they don't. They either got it right or they didn't.

But there are a lot of hidden costs that no one talks about. As someone who has reached full retirement age, I want to share a lot of things that you need to know for retirement that most people never talk about and then show how to compound all that forward so that a young person starting out can effectively plan for the future and not get a negative surprise down the road. It is never too early to start thinking about this. Early in my investment career, I learned two very important things. The first is that you can never have too much information and the second is that Knowledge is Power.

To fully understand how this works, you first must know how retirement plans are structured and what changes have occurred to get us to this point. Basically, there are two different Retirement Plan structures and which one you have or know you will have makes a big difference in how you plan going forward.

Defined Benefit Plan versus Defined Contribution Plan

The first plan is called a **Defined Benefit plan**. This is basically a pension plan where once you hit retirement and stop working, your employer will pay you a fixed amount for life. Depending on your plan, it may also adjust every year for inflation or not. It is an interesting concept because neither you nor your employer know how long you are going to live but they are making a commitment that no matter how long you live they will pay you. This is also called an Annuity. You should also be aware that while the numbers are not large, this is how Social Security works (i.e., a fixed amount of paid to you every month for the rest of your life). Back in the early 1980's when I started in the investment business, people who worked for State and Local governments did not get paid as much as people who might work in the private sector. So, the question was always why – other than the great satisfaction of being a teacher or fireman or state employee – would anyone take those jobs. The answer was that if you put in a certain number of years at that employer, you would be vested and then when you retire, you would start receiving payments for life (with the payment amount determined by the number of years worked and, possibly, age at retirement).

A lot of big companies used to offer Defined Benefit plans, but the problem for them was that if they did not manage their money well enough, they might have to put in money at the end of the year to keep the pension plan financially solvent which was very expensive. For this reason, many companies over the last 40 years have dropped their Defined Benefit plans.

What companies did was switch to the second type of Retirement Plan which is called a **Defined Contribution plan**. The most popular of these are 401K plans, which are similar in many ways to an Individual Retirement Account (IRA). You put in money, maybe your employer matches it (fully or partially), you select mutual funds to invest in, and hopefully when you retire your investments have grown and you have enough to retire. OR NOT. But if you do not have enough to retire in your Defined Contribution plan account at the time of your retirement, it is your problem not your company's problem, and you are on your own. So, obviously a good investment strategy is important.

Expenses During Retirement

The key point for our discussion about either of these types of retirement plans is that the objective for the person retiring is to establish a certain minimum level of income for the rest of their life once they stop working full time. But you don't know what the right number is unless you fully know what your real cost of living is at that time!

And the problem in this country that I want to point out is that people who have an IRA or 401K which is a defined contribution plan spend all their time just trying to make money and maybe thinking about retirement 'living expenses,' but they don't figure in all the other things that they will need to spend money on and there are other things that need to be added to the calculation. The important point is that even if you are only 21 or 22 years old, it is not too soon to start building spreadsheets and projecting what your retirement situation will need to look like, especially if you have already started setting money aside. Here is where having great excel skills is helpful. Also, most people forget that regular IRA's and 401K's are taxable and only Roth IRA's are not taxable when you take the money out – so make sure that you remember that, just like a paycheck, it is only the after tax amount to you that matters.

Let's now walk through the obvious and not so obvious things that you need to keep in mind when you try to figure out how much you need for retirement, so you can Reverse Engineer it to make sure your investment strategy is sound and effective.

1) **Annual Income** – This is the one that everyone thinks of. Figure out what your living expenses would be now if you retired and then you can compound them forward to your actual projected retirement year at whatever performance return rate you like. But remember that your living expense needs now are likely not what they will be in retirement. More on that later.

2) **Healthcare** – This is the big one. This starts with Medicare but to put this into your model, you need to understand how Medicare works.

Medicare was signed into law by President Lyndon Johnson on July 30, 1965. The idea was that just like Social Security, which was established in August of 1935, there needed to be some kind of social safety net for seniors as it related to Healthcare. It was determined that Healthcare, especially for seniors, was a very large cost and could wipe out people's savings if they could not afford to get it (or they would be denied treatment if they could not afford it). Medicare is funded primarily by payroll deductions from people currently working. Most people pay 1.45% of their pay to the government to fund this and employers pay another 1.45%. There is also an additional surcharge of 0.9% on earned income above $250,000 in a year.

But when you retire or reach age 65, you can claim Medicare benefits. There are two parts to Medicare. The first one is Part A which is for hospitalization, and it is free to you when you are retired. It does cover a number of things in the hospital, but there are significant deductibles and co-pays.

But to cover anything where a doctor is involved, you need to sign up for Medicare Part B, and that is where this fits into our discussion. In the US in 2025, Medicare Part B premiums costs $185 per person per month if your married retirement income in 2025 is at or below $212,000 per year (if your retirement income is above that, there are additional surcharges per month). But, Medicare only covers 80% of the costs, and you have to pay the rest. As of 2025, you also pay a $257 Medicare Part B annual deductible per person. Also keep in mind that once you start receiving Social Security, Medicare Part B premiums are deducted after tax from those payments.

Now here is where it gets even more complicated. If you want to figure out how to cover that other 20% – which, as a senior citizen can really add up, especially if your health starts to decline – you need one of two additional options. Option 1 is something called Medicare Advantage. This is offered by private companies with funding by the government but generally covers the additional expense and in many cases also covers prescription drugs, hearing, and vision care. It is also frequently offered with no premium per month. Sounds great right? Well, not so fast. These plans can be very restrictive. They generally have doctor networks you must use, are difficult to use out of state or have out of state extra charges, require doctor referrals or second opinions, and have co-pays. You also still must pay the monthly Medicare Part B premium and the $257 Medicare Part B deductible per person. It is fine if it is all you can afford, but if you can afford more, you would not choose it.

The Second option is Medicare Supplement, also called Medigap. Here there are currently 10 different plans that you buy from a private company. The coverage of each of the plans varies, but is exactly the same at each company (as regulated by law). The only difference is the premiums that the companies charge. That is to say, for example, that Plan B at one company provides exactly the same coverage as Plan B at another company. But here if you buy the best plan, which is called Medicare Plan G, you still pay the Medicare part B monthly premiums and the $257 Medicare part B deductible, but everything else is covered after that with no additional charges to you regardless of how many medical procedures you have. The only restriction is that your doctor has to participate in Medicare (which most do), but you can go to any doctor in the country. If your doctor accepts Medicare, you are covered and you can't be charged any more than what Medicare and the Medicare Supplement pays the doctor. But the problem as it relates to our discussion is that depending on your age when you sign up, the Medicare Supplement plan could cost $150 or more per person per month.

So as it relates to Healthcare, if you are a married couple, if you go the Medicare Advantage route, it could be ($185 x 2 x 12 months) + $257 Medicare Part B deductible x 2 = $4,954 per year plus a lot of inconvenience, referrals, insurance company restrictions, limited doctor networks, restrictive out of state rules plus copays which if you get really sick could add another $7,000 or $8,000 per year or more depending on your plan and that plan can change every year.

Or, if you go the Medicare Supplement route under the same scenario in 2025, you are looking at ($185 x 2 x 12 months) + ($257 Medicare Part B deductible x 2) + ($150 x 2 x 12 months) = $8,554 per year for two people but no more expenses after that. That is incredibly convenient and especially valuable if you get *really* sick (e.g., cancer, a major surgery, major heart issues, or all kinds of other very expensive things).

And then there are prescription drugs. If you are on Medicare Advantage, these expenses are probably covered under your premium (although you may face a lot of insurance company pressure to use generics). Or if you are on Medicare Supplement, depending on your medications, you will need a Medicare Part D prescription drug plan, which could run anywhere from just a few dollars per month to $100 per month per person.

And don't forget Dental insurance, which can run another $50 to $60 per month per person if you have Medicare Supplement or it might be included if you have Medicare Advantage (assuming your dentist will take the coverage which is not a guarantee).

So, putting it all together, in 2025 dollars and assuming that your retirement income is less than $212,000 per year for a Married Couple, if you have Medicare Advantage, just the premiums and Part B deductible could cost you $4,954 per year plus a ton of co-pays and other deductibles. If you need surgery, get really sick, or are out of state, your annual expenses could easily increase to $10,000 or more. Or if you go the Medicare Supplement route and get the most attractive plan, your worst-case scenario including dental is $9,154, but then there are no co-pays or other medical expenses after that regardless of how much medical care you need. There are some high-deductible Medicare supplement choices with cheaper premiums, but for a lot of reasons those are generally not as attractive.

So, when you figure out how much you need for retirement and you think about health care expenses, you better make sure that you understand the additional costs. For this year, a retired married couple is looking at anywhere from a maximum of $9,154 to possibly $11,000 to $12,000 or more. And all of this is in 2025 dollars (you should expect costs to be higher in the future, due to inflation). Even if these costs only go up 4% to 5% per year, you better make sure that your retirement portfolio performance is keeping up with this.

3) **Long-term Care** – Long-term care is something that, if you don't plan properly, can wipe out a lifetime of savings in a short amount of time. Long-term care refers to a number of things but generally it is something that covers your costs if your doctors certifies you with a long-term disability. There are six different categories where you can't take care of yourself and would need help with. If you need help with at least two of these (specifically: bathing, dressing, eating, transferring (moving from one place to another), toileting, and maintaining continence), you can qualify for paid Long-term care coverage – but only if you have a policy. Otherwise, you have to pay for the care yourself, which can be very expensive. Medicare does not generally cover long-term care, and neither does Medicare Advantage or Medicare Supplement. It could include Home Health care which is least expensive (generally around $30 per hour here in Georgia in 2025), Assisted Living where you are in a facility and it costs more (median *monthly* cost in the US between $4,000 and $8,000, *Source Seniorliving.org*) or Nursing Home care where you are in a facility that also provides medical attention (median *monthly* cost $9,500 semi private room/$10,900 private room, *Source Seniorliving.org.).*

   These are big numbers. It is estimated that anywhere from 40% to 60% of Americans will need some kind of long-term care in their lifetime. As you go through life and consider Reverse Engineering the real costs needed to be covered by your retirement plan, you have two choices here. *Choice One* – Roll the dice and hope you never need it but if you do, risk wiping out your retirement savings. *Choice Two* – Try to find some kind of Long-term care insurance policies and start paying premiums when you are in your 50's or whatever so you have protection. There is a school of thought regarding insurance that says that it is better to have it and not need it than to need it and not have it. Remember that. The real issue to consider with Long-term care and preparing for a potential Long-term care expense is not whether the cost wipes out the savings of the person living in the facility. Rather, it is whether it wipes out the retirement savings of the surviving spouse who is left, particularly if the spouse in the long-term care facility is there for a year or two and then passes away leaving the surviving spouse with severely diminished retirement savings to live on.

4) **Leaving assets to your heirs or spouse** – Every dollar you spend in retirement leaves less to pass along as inheritance. Interesting concept when you factor in that you don't know how long you are going to live. If you have a retirement plan that is paying you more after tax than you spend, then the balance of the portfolio is there for your spouse if you pass away. But if this is important to you, you should include this in your analysis of your costs

when you retire. You can just keep all your assets invested in the stock market after retirement, but remember if you suddenly have very bad health or very high expenses at a time when the market crashes, you are not in good shape. So Whole Life Insurance is a way around this, but it is expensive so it requires planning during your working life so you are not exposed when you retire.

Conclusion

So, what is the bottom line of all of this? The bottom line is that there are a whole bunch of additional expenses that you will incur in retirement that the average person – and especially the average young person just starting out – has not thought about.

It is said that in 1789, Benjamin Franklin quipped, "in this world, nothing is certain except death and taxes." I would submit that, at least as it all stands right now, that there is another issue and that is the inevitable need to protect yourself from financial devastation caused by insufficient healthcare planning. Everybody gets older. Everybody has more health care costs when they are older than when they are younger. Healthcare costs go up over time. If you make a retirement plan with a detailed spreadsheet and you do not allow for the contingent liabilities that poor healthcare planning creates, you will never be fully prepared and never achieve complete financial freedom. We know what the numbers are today, and we can make projections with various inflation assumptions to project forward to any date in the future. It has been my experience that everyone gets surprises, but people who plan have positive surprises while people who do not plan get crushed. I want you to be in the first group, not the second.

So, bottom line, my recommendation is that you put together a spreadsheet for all your expenses, if you retired today at age 65 or whatever *including all the costs outlined here*. Then, make an assumption for inflation in those costs of 3%, 4%, 5% or whatever, and compound that forward every year until the target retirement age. Remember that you are already doing that with your investments to assume a return, so you want to make sure that both your investment performance and your contributions are keeping up with where you want to be when you hit retirement. Along the way if there is a year where inflation is high or low, you can always make an adjustment to your model. But remember that Knowledge is Power and you want to always have a comprehensive plan that not only includes investment performance, but also projected increases in retirement expenditures. That is how you successfully Reverse Engineer your Real Retirement Costs.