

Portfolio Management in Retirement

Withdrawal Rates & Cash Flow Flooring Assessment

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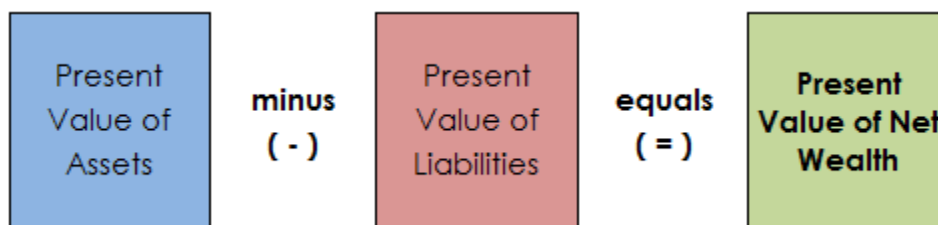
Managing wealth during our retirement years can be and usually is quite different than during our years of accumulation. During our accumulation years we should hope for depressed markets so that investments can be purchased cheaply. During our retirement years, however, earnings no longer exist so we rely on what we've accumulated, thus hope that markets rally throughout the rest of our lives. That is, as we are accumulating through periodic saving and rebalancing we should hope to "buy low" during our accumulation years in order to eventually "sell high" during our retirement.

Since we have no control over the markets into which we are born, market cycles both during our accumulation and retirement years are out of our control. During our accumulation years we can generally rely on our earnings to pull us through more difficult times, but during retirement we will be forced to rely on the resources we have accumulated and potentially be subjected to the whims of down market cycles. Therefore we need to gain an understanding of what our minimum lifestyle needs will be during retirement, and then properly position our retirement portfolios and cash flow strategy.

We start by assessing retirement "lifestyle needs" versus "wants":

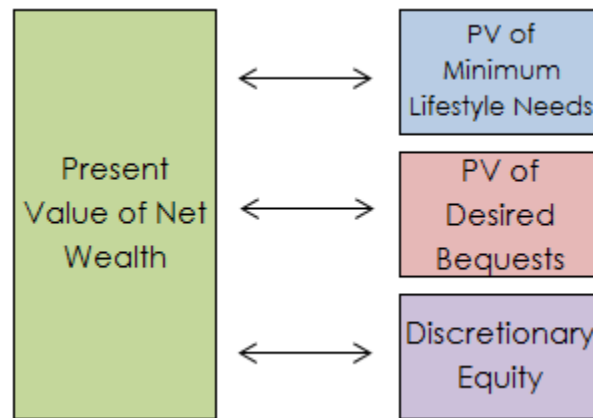
- **Lifestyle Needs:** Cash flow required to not only provide a baseline existence (e.g., keep us from eating Alpo), but to sustain our lifestyle to which we have become accustomed.
- **Wants:**
 - Legacy – the amount we would like to leave to our children, grandchildren, charities, etc. when we die.
 - Discretionary equity – the additional amount needed to fund some or all of a lifestyle to which we would like to become accustomed in the future, but can live without if the additional amount does not transpire.

Once we have quantified the present value¹ of our future needs and wants, we then should assess the present value of our net wealth we have managed to accumulate with the equation:



¹ Present value is defined as the **current** worth of money to be received or paid in the future based on a specific discount rate.

We can now compare the the present value of our net wealth to the present value of our future lifestyle needs, legacy, and discretionary equity expenditures. Graphically, this comparison would look something like this:

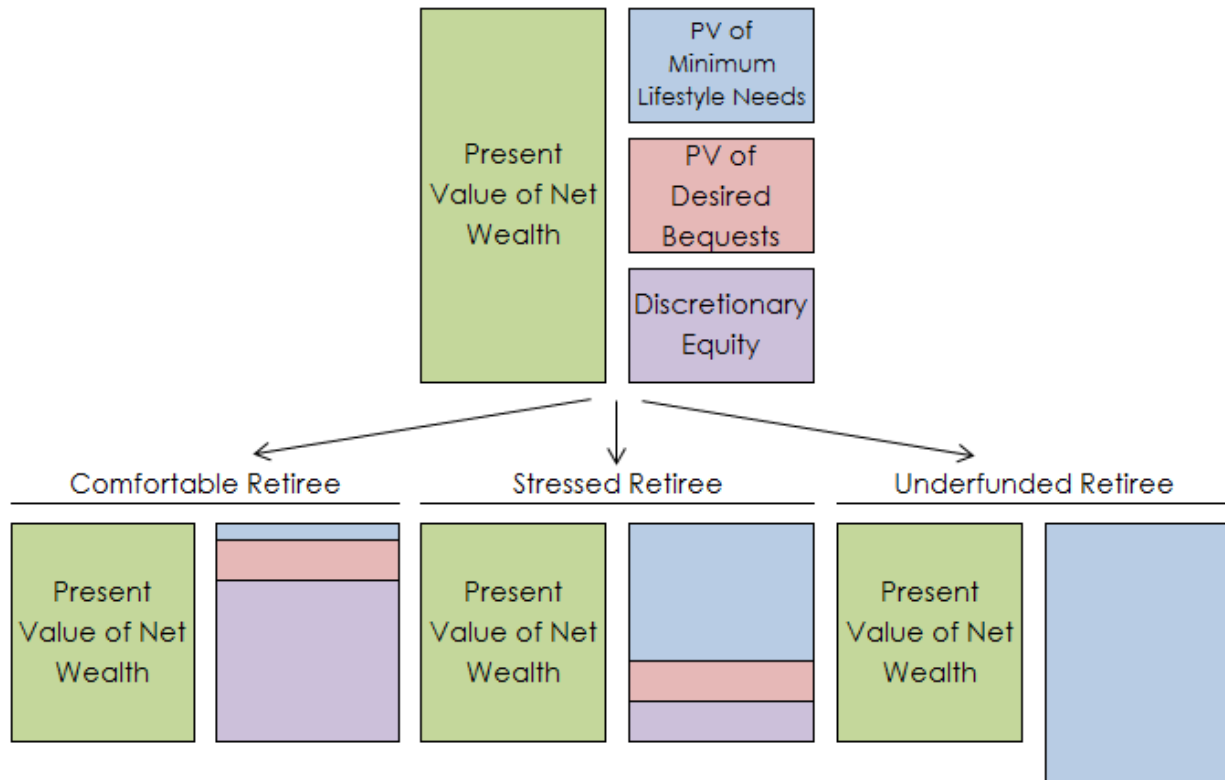


In the above example each future need and want are in exact proportion to one another and the sum of them is equal the present value of net wealth. In reality, however, this will not be the case. Instead, we will find ourselves in one of the following categories:

- **Comfortable retiree:** A person that has more than adequate present net wealth to fund their future minimum lifestyle needs given the probable range of market volatility and inflation. This person is quite wealthy relative to the lifestyle to which they have become accustomed, and might even be able to further improve their lifestyle in the future. Upon their death they will more or less fund desired bequests.
- **Stressed retiree:** A person that may or may not have adequate present net wealth to fund their future minimum lifestyle needs given the probable range of market volatility and inflation. This person is fairly wealthy relative to the lifestyle to which they have become accustomed, but potential market volatility and/or inflation might cause them to not actually fund their lifestyle goals. Upon their death they may or may not fund desired bequests.
- **Underfunded retiree:** A person not expected to have adequate present net wealth to fund their future minimum lifestyle needs given probable market volatility and inflation. This person has a slim chance of maintaining the lifestyle to which they have become accustomed. Upon their death it's highly unlikely they will fund any bequests they desire.

You will notice that the main focus of the above definitions is a comparison of current net worth to the present value of future anticipated minimum lifestyle funding needs. Let's be honest, when push comes to shove the main goal is usually to fund *our* lifestyle while we are alive; while potential legacy and upside discretionary goals tend to be secondary.

Below are examples of each retiree type net wealth compared to the present value of their future lifestyle needs and wants. You will notice the determination of retiree category relies on the *proportion* of the present value of minimum lifestyle needs (blue box) to the present value of net wealth (green box).



The above graphic should make sense because the future is largely unknown. That is, we can make assumptions about likely outcomes, but we *need* a cushion against potential future events such as extreme downward market volatility and/or inflation persisting worse than anticipated. In other words, just because the stressed retiree's plan appears to be fully funded now, future market forces and other events beyond our control could cause an entirely different outcome.

So what can be done? **First:** During our working years we should save early, often, and until it hurts. If we wait too long to begin saving, it may not be possible to make up lost ground. We should also not count on a future windfall to save us as it will most likely not happen. **Secondly:** LIVE BELOW OUR MEANS! It's far easier to become accustomed to a better lifestyle than be forced to adjust to a lower one. **Thirdly:** Every endeavor should be cash flow positive (i.e., watch debt levels!!). As Dickens' character Mr. Micawber said in *David Copperfield*, "Annual income twenty pounds, annual expenditure nineteen [pounds] nineteen [shillings] and six [pence], result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery."

Fourthly: If a portfolio rebalancing policy is in place, consider modifying it in retirement to allow for greater downward drift of its equity allocation since history has shown that depressed equity markets can be extremely long and deep. **Finally:** If you are near retirement and find yourself either a “stressed” or “underfunded” retiree, then you should have a heightened consideration toward building a “floor”.

Flooring

Flooring can be defined as a future cash flow stream that can be counted upon for a specific timeframe or through the rest of our life (aka, longevity insurance). It’s also critical to remember that the projected future cash flow requirements should be adjusted for inflation as inflation is probably the most destructive long term risk we face.

The “comfortable retiree” does not necessarily need flooring since their wealth is anticipated to absorb any shocks caused by large and/or prolonged downward market volatility. They may need to readjust their legacy and discretionary equity goals, but their baseline lifestyle needs will very likely be met if they manage their investment portfolio properly.

The “stressed retiree” should have some flooring in place since shocks due to large and/or prolonged downward market volatility may not only eliminate their legacy and discretionary equity goals, but their baseline lifestyle needs may become underfunded as well.

The “underfunded retiree” will not only have to pare back the lifestyle to which they have become accustomed (ouch!), but perhaps rely exclusively on flooring. This is due to the fact they will NOT be able to withstand even small and/or short bouts of downward market volatility.

Flooring types

There are many flooring types available, but I believe most have been designed be sold, not bought. Therefore I will focus on the flooring types I believe have the most credibility.

- **Social Security:** This is the most prevalent form of flooring in the United States. Social Security benefits are inflation adjusted and since benefits increase to age 70 if not taken earlier, it may be wise to hold off on taking benefits as long as possible to provide a good source of longevity flooring/insurance.
- **Employer Pensions:** Employer provided pensions are a good source of flooring, but unfortunately they are becoming quite rare. Some employer pensions have inflation adjustment and others do not. Most are also guaranteed by the PBGC (albeit at a lower amount), thus employer provided pensions should provide steady flooring.

- **Single Premium Immediate Annuities (SPIAs):** I generally do not care for retail annuities, but low-load SPIAs are the exception. SPIAs provide an income stream ultimately guaranteed by your state's [Life & Disability Insurance Guaranty Association](#), can be purchased with or without an inflation adjustment, and provide payments for either a certain time period or life. SPIAs generally work much like ordinary insurance. That is, given a pool of SPIA investors, some die earlier than others, thus those that die earlier subsidize those that live longer. Monthly SPIA payments are also higher when obtained later in life AND when prevailing interest rates are relatively high (e.g., if you are early in retirement and relatively young, SPIAs are currently somewhat unattractive on a historical basis).
- **Treasury STRIPS (principal component):** Treasury STRIPS are Treasury Notes, Bonds, & TIPS whose interest and principal components have been separated, or "stripped". When purchasing the principal component of STRIPS, the purchase is at a discount to par value. Upon maturity the par value is then paid to the owner. STRIPS can be laddered so that they come due as retirement funding is needed. Caution should be taken when investing in STRIPS, however, by recognizing potential inflation and the fact STRIPS create "phantom" taxable income. To mitigate these risks a retiree should factor inflation into their future cash needs estimate and generally purchase STRIPS within tax deferred accounts (e.g., Traditional IRAs) when possible.
- **Bond Allocation, in general:** The bond allocation of a portfolio generally provides an offset to the volatility created by the portfolio's equity allocation. Even though over long periods of time bonds would not be expected to provide the same level of inflation protection as equities (TIPS not necessarily withstanding this generality), the stability of high-quality shorter-duration bonds *would* be anticipated to provide a source of flooring over shorter periods of time. Therefore, it may be prudent to develop a rebalancing policy that allows for greater downward drift in equity allocations versus their targeted allocation than it would allow for their upward drift. Such a policy would also likely provide greater comfort to the retiree during times of market stress even though the long-term anticipated result would likely be lower returns than otherwise.

How do I know what sort of retiree I am?

The general rules² used to determine the type of retiree are:

- **Comfortable retiree:** It's anticipated the retiree will need to withdraw <3.5% of their marketable portfolio each year.
- **Stressed retiree:** It's anticipated the retiree will need to withdraw 3.5%-7% of their marketable portfolio each year.
- **Underfunded retiree:** It's anticipated the retiree will need to withdraw >7% of their marketable portfolio each year.

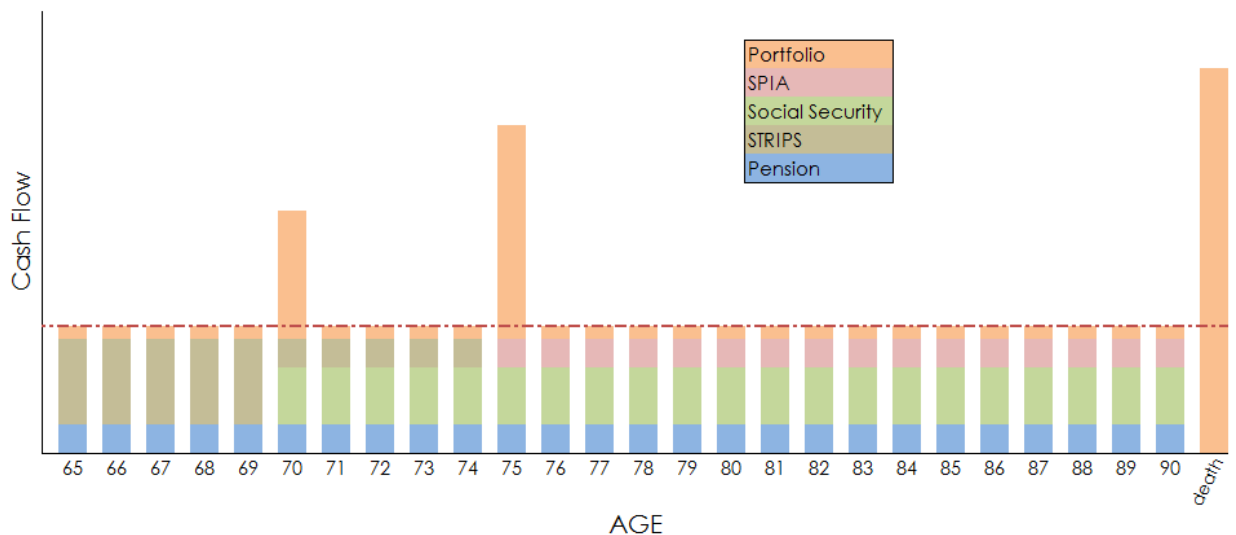
² [Here](#) is an article which describes various withdrawal rate studies. Though the methodologies among the various studies differ, the conclusions are quite similar.

Cash flow for the comfortable retiree:

If a retiree withdraws <3.5% of her portfolio each year then she will likely be fine, right? Not necessarily. Like all investors it's critical the comfortable retiree construct a diversified portfolio with an appropriate mix of stocks and bonds while developing strategies to minimize income and estate taxes, thereby increasing after-tax returns for both herself and her heirs. Further, like everyone, the comfortable retiree should properly insure against potentially devastating legal liability. The best portfolio, income tax, and estate planning strategies won't save anyone that's found liable in a relatively massive liability lawsuit, but not properly insured against such an event.

Cash flow for a stressed retiree:

Here's an example of what the cash flow for a stressed retiree might look like during retirement (for simplicity, I've assumed no inflation):

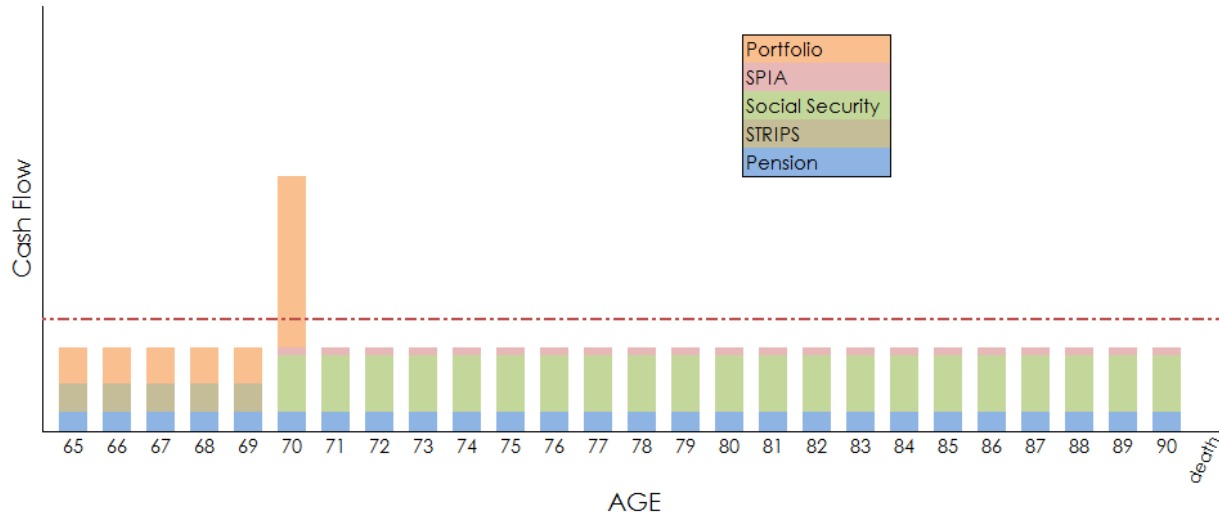


In this example the retiree needed to withdraw 3.5%-7% each year to maintain her desired lifestyle in retirement. Her lifestyle funding requirement is signified by the dashed red line. The main actions this retiree took to fund her retirement were:

- The retiree bought STRIPS to postpone taking Social Security benefits until age 70 in order to maximize the "longevity insurance" that Social Security provides.
- The retiree did not purchase all the STRIPS at once, but made a laddered purchase before retirement and then again at age 70 due to her belief that interest rates were too low at ages 64 through 69.
- Just before reaching age 75 the retiree used some of her portfolio to purchase a low-load SPIA (through her fee-only NAPFA planner, of course, who received no commissions) since both her age and prevailing interest rates made that an attractive flooring investment.³
- The retiree died at age 91 with investment assets. Since the future is ALWAYS unpredictable, the retiree realized that it's not a prudent strategy to plan to spend down to zero.

Cash flow for an underfunded retiree:

Here's an example of what the cash flow for an underfunded retiree might look like during retirement (again, for simplicity, I've assumed no inflation):



In this example the retiree needed to withdraw $>7\%$ each year to maintain his desired lifestyle in retirement. His lifestyle funding requirement is signified by the dashed red line. Since the retiree had not made prudent investing/saving decisions during his working years, drastic lifestyle changes were required at age 65 when he could no longer work. The main actions this retiree took to fund his retirement were:

- The retiree greatly reduced his standard of living during his retirement years.
- The retiree bought STRIPS to postpone taking Social Security benefits until age 70 in order to maximize the "longevity insurance" that Social Security provides.
- Just before reaching age 70 the retiree used his remaining portfolio balance to purchase a low-load SPIA since he knew that his portfolio would very likely not last for the rest of his life.³
- The retiree died at age 91 with no assets.

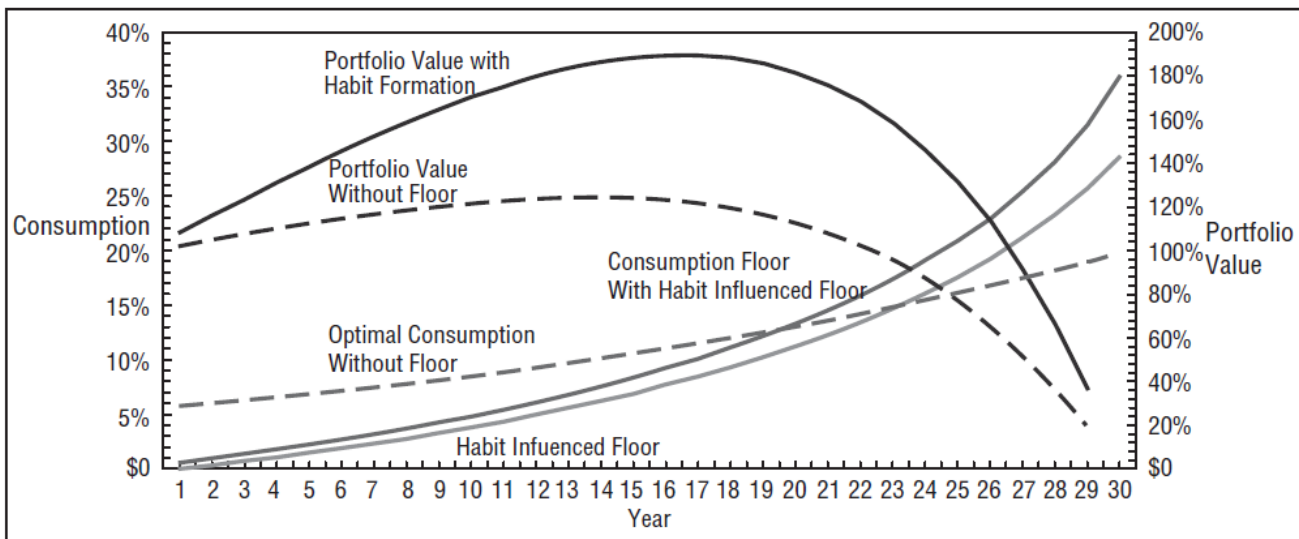
³ A note of caution: Though credit ratings do provide comfort that SPIA providers will be able to fully fund their SPIA obligations, this is not a guarantee. SPIA investors should consider strategies to mitigate this risk.

Flooring and inflation

When seeking to floor a monthly/annual retirement cash flow, the long term effect of inflation on purchasing power should not be underestimated. For example, let's say a 65 year old retiree determines that his monthly floor requirement is \$1,000, so he buys a SPIA which pays \$1,000 for life without an adjustment for inflation. Further, let's assume that throughout his life inflation is 3%, compounded monthly. When the retiree turns 85, his \$1,000/month annuity will have only 55% of the purchasing power compared to when he took his first monthly payment!!

Flooring, habit formation, and alternative withdrawal rate methods:

Most all of us are creatures of habit. As our household cash flow rises, so does our habituated lifestyle, especially when our initial cash flow is relatively low. For those that have a relatively low starting cash flow spending habit, flooring tends to have the dual effect of constraining our spending habits in the short run while in long run flooring tends to increase spending habits more than might have been the case without flooring. This phenomenon can be seen in the Lax model of habit formation:



Lax Model: Initial Habit Formation Starting from a Low Floor

Source: Michael J. Zwecher, [Retirement Portfolios](#)

Further, most "safe withdrawal rate" studies assume a withdrawal rate based on a percentage of an initial portfolio valuation, and then simply adjust the initial nominal result upward each year for inflation without future consideration of portfolio value. In the first of his five part series "[The Retirement Calculator From Hell](#)" (1998), Dr. William Bernstein shook the financial planning community's belief that a 4% withdrawal rate was indeed "safe". Instead, Dr. Bernstein argued for an appropriate allocation of stocks/bonds coupled with year-to-year spending flexibility, but such flexibility requires the retiree to adjust spending each year

according to his portfolio's performance. Therein lays the rub with habit formation. In my experience, when markets rally people have high expectations for the future. During those times their portfolios are performing remarkably well, and if an annual withdrawal rate is adjusted each year according to the portfolio's then current valuation, spending *habits* tend to adjust upward as well. When markets mean revert (as they always do), it's generally painful for them to adjust higher spending habits downward. The lower annual cash flow coupled with lower portfolio valuations tends to cause habituated investors to become distraught. It's much easier and more prudent to keep spending habits (and debt) in check as we go.

Withdrawing more from a portfolio when it's high isn't a bad thing, however. The key is to keep spending in check during these times and squirrel cash away for potential leaner times. Remember, though, that good times aren't apparent when they are happening! Instead, most people tend to trend-line exceptional markets upward into the future without really considering the possibility of a major correction (see: recent housing bubble). An alternative withdrawal methodology to either the "initial percentage of portfolio adjusted each year for inflation" or "percentage of current/trailing average valuation" is a more dynamic one: [percentage of portfolio with a ceiling and floor](#). This approach considers current portfolio valuations as well as past spending. For those prone to habituated lifestyle spending linked to household cash flow, this approach puts both caps and floors on annual portfolio distributions, thus may be a better solution.

Cash stash

Regardless of financial position, everyone should have a ready source of cash to fund unanticipated events. Unanticipated events might be a rapid market downturn (see: 2008/2009) and/or an emergency which requires immediate funding. Not only will a ready source of cash enable you to avoid raiding your portfolio when the market is low (which always seems to be the case when an emergency arises), but it also tends to help us sleep better by knowing cash is available if it's needed. Though returns on cash are currently near zero (thus its anticipated [real return](#) is likely negative), the benefits a source of ready cash afford are very likely worth the costs of maintaining it.

How much cash should a retiree keep on-hand? The answer to this question varies from one person to the next, but I suggest you begin by asking yourself the following questions:

1. Is the need for extraordinary repairs/maintenance (e.g., home, auto, etc.) likely within the next 3 years? If so, what are the likely required funding needs?
2. What are your insurance deductibles?
3. If you rely heavily on your marketable portfolio to cover your yearly cash flow needs, how would a substantial market downturn affect your annual withdrawals/lifestyle? Would you be able to quickly adjust?
4. Do you have extraordinary purchases planned within the next 3 years?
5. Do you have dependents that may require your financial assistance?

There is no perfect answer to the “how much cash should I stash” question. At the end of the day, one should ask themselves, “How much might I need to cover an emergency and/or planned extraordinary expenditure?”, and then build an appropriate cash balance in order to avoid a “forced sale” when/if such a cash need arises.

Where should a retiree keep emergency cash? Again, the answer is not the same for everyone, but here are some potential solutions:

1. Insured deposit accounts including bank savings and checking.
2. Insured and laddered Certificates of Deposit (CDs)
3. Insured Money Market (be aware that no two money markets are the same; and carefully read and understand Prospectuses before investing)
4. Laddered STRIPS (keep in mind the “phantom” taxable income that STRIPS create, and then develop a strategy to maximize after-tax returns)
5. Line-of-credit (lines-of-credit can be useful emergency funding tools if used appropriately)

When developing a cash account strategy it’s important to remember that the goal of the account is to avoid the short term risk of forced sales when markets are low. Therefore, even if a cash-type account is not earning much (as is currently the case), that opportunity cost is simply a cost of risk-hedging. DO NOT stretch for additional yield in your cash accounts. Some banks offer slightly higher rates than others, and while shopping around for higher rates is worth pursuing, take caution especially when the disparity in rates is large. REMEMBER: there are no free lunches. If yields are significantly higher, then risks are very likely higher as well. As in all aspects of financial planning, one of the investor’s main jobs is to fully understand the risks associated with each potential solution *before* investing.

Summary

- Managing wealth during our retirement years can be and usually is quite different than during our years of accumulation.
- Retirement funding consists of “lifestyle needs” and “wants”
- “Flooring” provides a base cash flow stream during retirement to help fund retirement funding lifestyle needs
- The amount “flooring” required is largely determined by resources available at retirement relative to the present value of future lifestyle needs
- Unless retirement funding must consist of only flooring-type resources, planning to zero assets is not a good plan
- Do not underestimate the long-term effects of inflation, therefore retirement funding resources should be positioned to hedge against it
- Realize that most everyone becomes habituated to lifestyle, and increasing lifestyle is *much* easier than decreasing it
- A flexible withdrawal rate strategy during retirement will improve your probability of success
- Have a ready source of cash to hedge against the risk of unforeseen events

Remember: *Develop a financial plan according to your unique situation and manage your assets according to a well thought out and documented investment policy. Doing so will greatly increase the probability you will actually meet your financial goals.*

This paper is intended to address broadly defined financial planning issues. If you need assistance developing a wealth management program tailored to your unique situation, then seek the assistance of a fee-only NAPFA registered financial advisor who is also a CERTIFIED FINANCIAL PLANNER™ professional having the proper education and experience.