



April 22, 2015.

## Will I have enough to retire?

This is a question that is worth pondering at all ages but one that looms particularly large as we reach our 50's. It is a difficult question to answer. Not only can it be psychologically demanding, it is also a bit of a mathematical challenge. It is equivalent to attempting to resolve an equation with multiple variables: some that we control and some that we do not. There is enough complexity there that one can quickly abandon any serious attempt at answering the question. My objective in writing this note is to help you get on with it, point where the issues are, where the shortcuts can be useful and where they can be damaging and finally arm you with the questions you need to ask if you seek professional assistance.

I have read a number of papers on the subject of retirement and the complexities associated with longevity risk or proper asset diversification for example. Yet none of them addressed the totality of the issue. What follows is a summary of what I think matters. It is inspired from a number of documents including a rather complete work produced by JP Morgan entitled "Guide to Retirement". The four charts further down in this note are extracted from this document. It is available for download at: <http://www.fleurus-ia.com/wp-content/uploads/2014/11/JP-Morgan-on-Retirement.pdf>

### The problem

Retirement is impacted by:

- **Variables that we control:** such as portfolio diversification, level of savings and spending,
- **Variables outside our control:** such as market returns and government policies regarding social security and other entitlements, and
- **Variables on which we have some control but not complete control:** such as longevity, health and employment duration.

Each subset presents a challenge. No wonder that we have difficulty answering the question very satisfactorily!

### The simple answer

If you have researched this issue, there is a good chance that you have come across the "**25 times**" rule of thumb. It says that if your portfolio is 25 times the amount that you expect to withdraw during the first year of your retirement, it should last about 30 years.

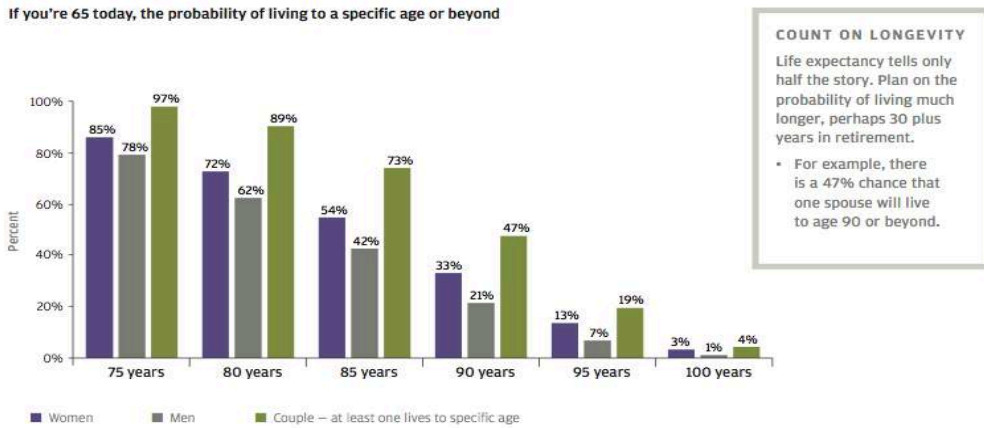
A numerical example will help. Let's say that you expect to need \$100,000 to sustain your lifestyle during your first year of retirement. Let's further assume that you will receive about \$60,000 from social security and a pension from your ex-employer. In this example, you would need to fund a deficit of \$40,000 annually. The rule of 25 says that if your portfolio at that time is \$1,000,000 (25 X \$40,000), it should be able to support you for 30 years, at that level of consumption (adjusted for inflation). Another way to look at this rule is to say that if you "consume" about 4% of your portfolio every year (the inverse of 25) it should be sufficient to support you for 30 years.

While useful as a signpost, this rule is not a panacea and does not answer all scenarios. First, It assumes an average rate of return on your portfolio that may or not be achieved and a constant level of inflation on the expense side, over thirty years. Life is not that simple and linear, as we know. What if the rate of return of your portfolio drops significantly during the first three to five years of your retirement? What if your expense level grows faster than overall inflation, as medical expenses tend to do? What if you live longer

than 30 years? In fairness, the rule of 25 is an approximation. No one should seriously rely on it as an accurate measure of your specific retirement, but it is a good number to keep in mind.

**Why it is not that simple**

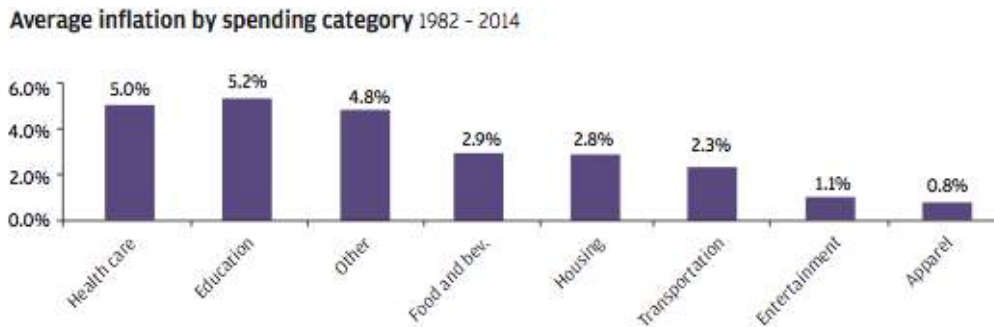
**Longevity.** Below is a chart from JP Morgan that tells the story.



You can see the limitation of the rule of 25. If you are a woman of 65 today, actuarial tables say that there is a 13% chance that you will live to 95. There goes the 30 year assumption of the 25 times rule of thumb!

With longevity issues comes the challenge of **long-term care**? The longer we live, the likelier the chance that we will need long term care. These expenses can be very substantial and should be factored, in your annual expenses. One way to do so is to include the cost of buying adequate long-term care insurance in your annual retirement expenses. It is not a perfect solution but an acceptable one, given the uncertainties associated with a need that may or not materialize.

**Inflation.** When it comes to retirement projections, most calculations assume an overall annual rate of inflation between 2% and 3%. Yet, if you are a high consumer of medical services, you may want to assume a less favorable rate. The chart below shows why.

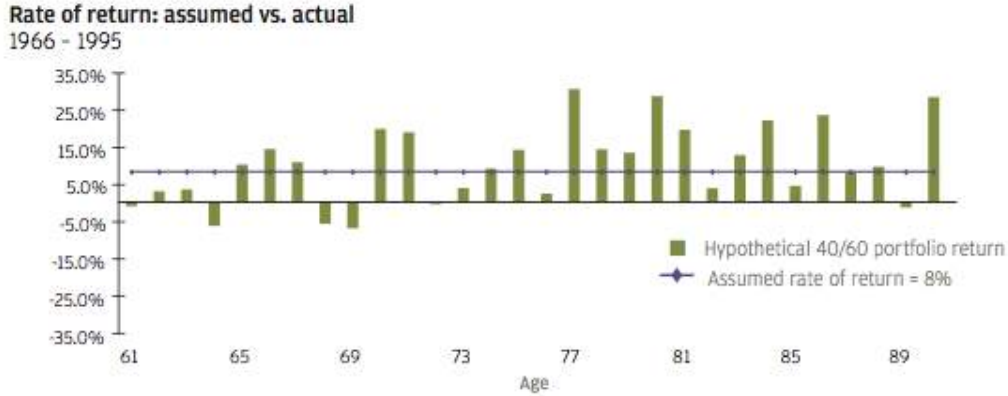


Again, all things equal otherwise, you may want to build a cushion and aim at a portfolio equal to 30 times or 35 times your net annual expenses, particularly if your health is likely to require above average care.

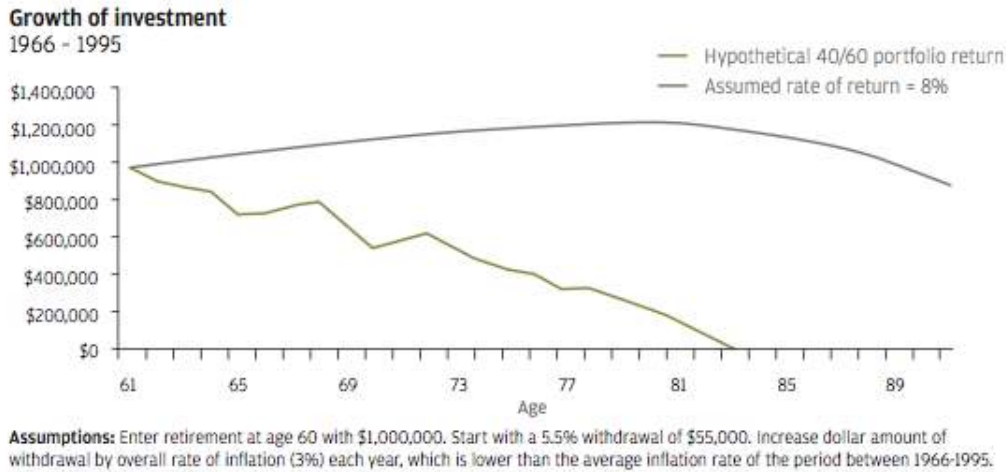
### Portfolio returns and withdrawals

Even if you have a sizeable portfolio to begin with, withdrawing too aggressively early on or volatile markets over extended periods of time can devastate it. The ability of your portfolio to sustain your needs over the long run could be seriously compromised as a result. I personally view this risk as the most significant to an otherwise well thought-out plan.

As an illustration, let's look at the annual returns of a hypothetical 40% (equities-S&P's 500) /60% (bonds-Barclays US Aggregate) portfolio over the period 1966-1995. The average annual return of this portfolio would have been 9.85%.



In spite of a relatively high average return over this 30 year period (9.85%), a portfolio of \$1 million would not have been sufficient to meet the needs of a retiree consuming 5.5% every year. The reason: the rate of consumption (5.5%) combined to the below average performance in the years immediately following retirement damaged the portfolio too much for it to recover sufficiently in the later years. As illustrated below:



This portfolio would have been depleted as the investor reached the age of 82 to 83.

## Conclusion

The question we asked is a complex one. The rule of 25 provides an easy and simple way to assess whether your portfolio has a chance to meet your long-term retirement needs. But it is a crude one. Each one of us is different and a well thought out plan is necessarily a tailored one. It should be specific to you and your circumstances. If you are not equipped to develop this plan yourself, as most of us are not, seek the help of a qualified professional.

The discussion above gave some of the key parameters that you and your service provider should focus on. Here they are, as a summary:

- Portfolio return assumptions. Make sure that they are conservative. Wall Street is still using expected annual returns of 8% to 9% for equities in their projections. This is far from conservative. My recommendation: use 6% for equities and 3% for bonds. So that a 50%/50% portfolio should bring about 4.5% per annum.
- Inflation assumption. A 2% to 3% annual expense inflation rate is adequate under current circumstances but not if you have a history of health issues. You may want to be a bit more conservative if that is the case.
- Longevity. Assume that you will live at least 35 years in retirement.
- Long-term care Insurance: Buy some protection now. If you do not need it, your spouse might. Factor in that cost in your analysis.
- Consumption. Try to consume less than 4% of your portfolio every year. The rule of 25 assumes a 4% consumption level. Less than that will help. If at all possible, aim for 3% to 3.5% to give you more room.
- Portfolio allocation. In today's environment I do not see how any responsible financial advisor would recommend a 65-year old individual to put more than 50% of their portfolio in equities. Yet I have seen it! Enduring damage is inflicted on a portfolio when performance is poor, stretches over several years, and is compounded by withdrawals. You can't control the market but you can control your exposure to it.
- Annual assessment. Market conditions change. Your circumstances will change too. For a plan to work it is important that you review it periodically. At least once annually. Your asset allocation should be reassessed at that time and adjusted as needed. This is a dynamic process.

The subject of funding for retirement is complex. Simple answers are generally not the right answers. I have tried to point out where the most significant risks are when going through this exercise. I hope that this has been helpful. As always, feel free to call me with any questions.

Jeff de Valdivia, CFA, CFP® is founder of Fleurus Investment Advisory, LLC - a registered investment advisor. Details on his firm can be found at [www.fleurus-ia.com](http://www.fleurus-ia.com).