Can "Sequence of Returns" Risk be Avoided?

By Charles Fulmer, CFP®

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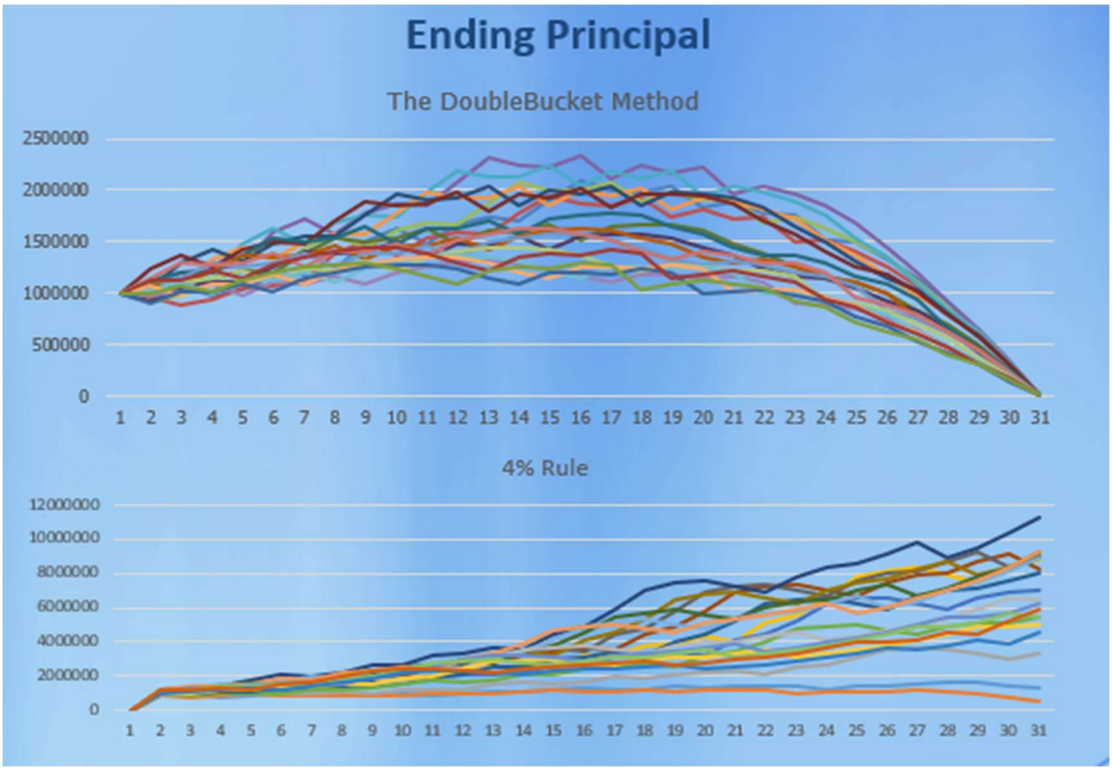
"Sequence of Returns" (which we'll refer to as SoR) and the associated risk are a common subject of discussion on how they affect retirement withdrawal plans. SoR risk, with respect to retirement withdrawals, is the risk of running out of money before the end of the retirement span. If you go to www.YouTube.com and search for "Sequence of Returns" you'll find some excellent videos that explain the concept. Unfortunately, there is little mention in the blogosphere on how to avoid SoR risk. You will find things like "guard rail" systems and other methods that try to react to market changes along the way, but they seem somewhat arbitrary and hard to follow. Plus, they only try to reduce the risk and don't necessarily avoid it. It turns out, however, that SoR Risk can totally be avoided. "How", may you ask? It's really a pretty simple concept but I had never thought about it until I came across the DoubleBucket® (DB) Method. Instead of trying to avoid running out of money, the DB Method drains down exactly to zero at the end of the span. It does so by starting with an aggressive asset mix which slowly becomes more conservative until it only has cash in the last year or two. In that way, it guarantees that principal will never run out. If 30 years is too short, you can extend it to 35 years or more. The method doesn't care, it will do the math based upon your time frame. Extending the time frame does mean that withdrawal amounts will be less, but surprisingly not as much as you might think. That's because the funds used to finance those latter years can be in higher risk investments, which cost little in today's dollar.

As the name suggests, the DB Method uses a bucket system to organize the funds and a moving asset allocation table to determine yearly rebalancing. Since the time frame is deterministic, a mathematical formula can be used to establish a yearly withdrawal rate and asset allocations. History has shown that roughly 90% of past 30-yr spans (since 1972) can use a 5-6% withdrawal rate. In the other 10%, the average withdrawal rate is still above 4%. These impressive rates can be achieved because the method takes full advantage of capital as it drains down to zero. As you would expect, avoiding a risk has consequences. In the case of the DB method, avoiding SoR risk results in variable withdrawals as they go up and down with market performance. For those retirees that want a guaranteed withdrawal rate, the DB Method may not be a good fit. However, for those that want to optimize their spending (beyond 4%) and don't necessarily need to leave an estate, the DB method would be an ideal alternative.

The following graph shows the yearly withdrawal amounts for the DB method on an initial principal of $1m. Each colored line shows the yearly inflation adjusted withdrawal over a 30-yr span. There are 20 different lines representing the time spans starting with 1972-2001 up to 1991-2020. Note that the initial withdrawal starts around $60k and goes up and down from there, but in no case was the yearly withdrawal below $40k (i.e., the 4% Rule).

This next graph shows the ending principal after each year of the span for the DB Method versus the 4% Rule. Each span starts with $1m. Note that the DB Method builds principal in the middle years and then drains down to zero at end. The 4% Rule, on the other hand, has a wide disparity in ending principal.



In full disclosure I do have an involvement in the DB method, but as a partner not a developer. A mathematician named Craig Pedersen developed the method and I happened to discover it and fell in love with the concept. I simply provide my experience in the financial industry to smooth out the curves. This is purely a research project developed to supply an alternative to the 4% rule. For more details, please see the full research paper on the DB Method along with a paper on the general concepts of SoR:

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