

Pre-retirement and Post-retirement Asset Management White Paper:

REAL rate of return is more important for retirees than your average return.

Over the last 2 decades. the US retirement landscape has shifted FROM the employer providing retirement income and TO the individual participant being accountable for ensuring their own retirement income program. Yet most people do not know the difference between (1) Sequence of Returns (2) Pre-Retirement assets management and (3) Post-Retirement assets management.

Few know that during retirement, “when” you receive your return is more important than “what” is your average rate of return is! We will use the following 3 examples to teach you how a small difference in return can potentially have a serious impact during your retirement.

EXAMPLE #1: A PRE- retirement asset management account of \$100,000 in a 401(k) account with no additional deposits or withdrawals, assuming random hypothetical rates of returns and their inverse:

Example #1a; 10% Average annual return on \$100,000 initial account value
Year 1 Total Return: -25% Account Value EOY1= \$75,000
Year 2 Total Return: +50% Account Value EOY2= \$112,500
Year 3 Total Return: -25% Account Value EOY2= \$84,375
Year 4 Total Return: +40% Account Value EOY2= \$118,125
AVERAGE annual return = $(-25 + 50 -25 +40 / 4) = +10\%$
REAL annual average return = $(\$118,125 - \$100,000 / 4 \text{ yrs}) = +4.5\%$

Now lets REVERSE the sequence of these random hypothetical rates of return:

Example #1b; 10% Average annual return on \$100,000 initial account value
Year 1 Total Return: +40% Account Value EOY1= \$140,000
Year 2 Total Return: -25% Account Value EOY2= \$105,000
Year 3 Total Return: +50% Account Value EOY3= \$157,500
Year 4 Total Return: -25% Account Value EOY4= \$118,125
AVERAGE annual return = $(-25 + 50 -25 +40 / 4) = +10\%$
REAL average rate of return = $(\$118,125 - \$100,000 / 4 \text{ yrs}) = +4.5\%$

Result: Even if you reverse the sequence of return, your average annual rates of return will be the same (simple math) and if you experience any negative annual returns, your REAL average annual rate of return will be LOWER than your average annual rate of return.

Conclusion: during the accumulation stage, the SEQUENCE of your returns (regardless of if they are up or down) does not have as much as an impact on your account value and if you have any negative annual return, your average annual return will be LESS THAN your REAL average annual rate of return.

EXAMPLE 2: Compare 2 accounts, one that has DOUBLE the average annual rate of return at of another account.

Example #2a; a 20% Average annual return on \$100,000 initial account value

Year 1 Total Return: -50% Account Value EOY1= \$50,000

Year 2 Total Return: +90% Account Value EOY2= \$95,000

AVERAGE annual return = $(-50 + 90 / 2) = +20\%$

REAL average rate of return = $(\$95,000 - \$100,000 / 2) = -2.5\%$

Example #2b; a 9.28% Average annual return on \$100,000 initial account value

Year 1 Total Return: +4% Account Value EOY1= \$104,000

Year 2 Total Return: +14% Account Value EOY2= \$118,560

AVERAGE annual return = $(4 + 14 / 2) = +9\%$

REAL average rate of return = $(\$118,560 - \$100,000 / 2) = 9.28\%$

Result: The account with an average annual rate of return of LESS THAN HALF than the other account has an account balance of almost 24% MORE of initial value, and has a significantly GREATER REAL average annual rate of return.

Conclusion: more consistent positive annual returns may result in a lower annual average rate of return, but a greater REAL average rate of return (how much money you have in your account).

EXAMPLE 3. What if we have one average annual rate of return that is more than DOUBLE that of another account, repeat the SAME sequence, AND take a 5% retirement income withdrawal from your nest egg account?

Example #3a; 20% Average annual return AND withdraw 5% (\$5,000) each year:

Year 1 Total Return: -50% Account Value EOY1= \$45,000

Year 2 Total Return: +90% Account Value EOY2= \$80,500

AVERAGE annual return = $(-50 + 90 / 2) = +20\%$

REAL average rate of return = $(\$80,500 + 10,000) - \$100,000 / 2) = -4.75\%$ net

IF this sequence of return continues for 11 years:

Account value = \$0, Client runs out of money!

Example #3b: 9% Average annual return AND withdraw 5% (\$5,000) each year:

Year 1 Total Return: +4% Account Value EOY1= \$99,000

Year 2 Total Return: +14% Account Value EOY2= \$107,860

AVERAGE annual return = $(4 + 14 / 2) = +9\%$

REAL average rate of return = $((\$107,860 + 10,000) - \$100,000 / 2) = +3.93\%$ net
IF this sequence of return continues for 11 years:

Result: Client account value = \$158,131 (\$58,131 greater than initial value!)
5.28% average annual REAL rate of return AFTER taking \$55,000 in withdrawals

Conclusion: your REAL rate of return (calculus) is has a GREATER IMPACT on retirees taking retirement income from their nest egg than what your account's average annual return. (math)

There are two types of retirement income and asset management:

1. Pre-Retirement assets management
2. POST-retirement asset management, the “distribution phase” of retirement.

During Pre-Retirement assets management, like a participant in a 401K plan, your Sequence of Returns, the “when” and “What” is not as critical as during Post-Retirement assets management.

During Pre-Retirement assets management, negative annual returns may not have as a dramatic affect on your account value as they do during Post-Retirement assets management (the “distribution phase” of retirement) - when you need the asset most!

My name is Tom Fayen and as a Fiduciary, Conservativemoney for the past 26 years we have helped people retire using Post-Retirement Asset Management -- It's not just WHAT your rate of return is, it's also WHEN the ups and downs occur. You may not know it, but the single most immediate risk for a retiree taking income from their nest egg is “Sequence of Returns”. During the distribution phase of your retirement, “When” is more critical than “WHAT”. Many know what their rate of return is, few know the importance of “when” you receive that return. To put it another way, people who are retired usually prefer consistency over performance: You can have great average annual performance but run out of money.

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