

# Alan Unplugged



## SEQUENCE OF RETURNS

I received a ton of positive feedback from the article on the "Power of Compounding" in our winter newsletter. Keeping with the theme of "fun with numbers", I want to share some thoughts on the Sequence of Returns. Truth is, this one scares me a little, and I will tell you why soon! Consider the accompanying chart. It shows two investors, Alan and Barbara, happily in retirement, both of whom enjoy a solid 8% long-term return. They each take withdrawals of \$10,302 the first year (5% of the beginning value), adjusted for 3% inflation thereafter. However, that is where the fun ends (for Alan). You will notice that the sequence of returns for Alan and Barbara are simply reversed.

While Barbara enjoys solid long-term growth, with an ending value of \$793,304 after 25 years, Alan went broke at year 14. What happened to the 8%?

**What happened is compounding in reverse! The early losses for Alan were simply too much to recover.**

During the asset accumulation phase of your investing life, whether you make 100% the first year then lose 50% the next year, or lose 50% then make 100%, you will end up with the same dollar amount. Sequence of returns does not matter. However, if you are in withdrawal mode the results are much different. You simply don't have as many investment dollars available to go back up. Keep that process up and it's a shorter sprint to the finish line! The part that scares me is that sequence of returns is most critical to those clients that are either in or close to retirement. If you need/want to spend your way into eternity, you must lower your return expectations, follow a more conservative asset allocation model, and ensure the money train ends when you decide, not when the markets decide for you. I also understand Alan is now living in Barbara's basement!

*Alan*

ALAN'S PORTFOLIO POOR EARLY RETURNS			
AGE	RETURN	WITHDRAWAL	VALUE
65			\$206,049
66	-34.2%	\$10,302	\$128,801
67	-10.6%	\$10,612	\$105,662
68	13.6%	\$10,930	\$107,615
69	11.5%	\$11,258	\$107,439
70	27.4%	\$11,595	\$122,104
71	1.5%	\$11,943	\$111,813
72	-18.4%	\$12,302	\$81,201
73	2.0%	\$12,671	\$69,901
74	-8.7%	\$13,051	\$51,904
75	14.0%	\$13,442	\$43,847
76	12.4%	\$13,846	\$33,721
77	12.0%	\$14,261	\$21,796
78	-9.5%	\$14,689	\$6,432
79	28.6%	\$6,432	\$0
80	7.8%		\$0
81	19.7%		\$0
82	35.8%		\$0
83	-2.2%		\$0
84	25.8%		\$0
85	9.8%		\$0
86	19.8%		\$0
87	7.4%		\$0
88	17.9%		\$0
89	22.0%		\$0
90	28.2%		\$0
	<b>8.0%</b>	<b>\$167,334</b>	<b>\$0</b>

BARBARA'S PORTFOLIO STRONG EARLY RETURNS			
AGE	RETURN	WITHDRAWAL	VALUE
65			\$206,049
66	28.2%	\$10,302	\$250,947
67	22.0%	\$10,612	\$293,209
68	17.9%	\$10,930	\$332,807
69	7.4%	\$11,258	\$345,344
70	19.8%	\$11,595	\$399,831
71	9.8%	\$11,943	\$425,901
72	25.8%	\$12,302	\$520,308
73	-2.2%	\$12,671	\$496,469
74	35.8%	\$13,051	\$656,482
75	19.7%	\$13,442	\$769,718
76	7.8%	\$13,846	\$814,831
77	28.6%	\$14,261	\$1,029,533
78	-9.5%	\$14,689	\$918,434
79	12.0%	\$15,129	\$1,011,701
80	12.4%	\$15,583	\$1,119,636
81	14.0%	\$16,051	\$1,258,087
82	-8.7%	\$16,532	\$1,133,539
83	2.0%	\$17,028	\$1,138,841
84	-18.4%	\$17,539	\$914,982
85	1.5%	\$18,065	\$910,371
86	27.4%	\$18,607	\$1,136,107
87	11.5%	\$19,166	\$1,245,389
88	13.6%	\$19,741	\$1,392,337
89	-10.6%	\$20,333	\$1,226,572
90	-34.2%	\$20,943	\$793,304
	<b>8.0%</b>	<b>\$375,619</b>	<b>\$793,304</b>