The secret about sequence of returns[1]

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New research conducted by Nedgroup Investments has debunked the idea of sequencing of return risk, and traditional methods to mitigate it. Instead, it is more important to find practical ways to help retired investors withstand the urge to disinvest or make emotionally driven changes to their investments during volatility, particularly if this occurs in the early years of retirement.

Sequence of returns risk refers to the risk to a retiree of retiring just before a crisis or negative returns. Should this occur, the retiree starts off retirement by regularly withdrawing money from their investment to provide their income and the money withdrawn can never recover when the market recovers.

Tracy Jensen, Senior Investment Analyst at Nedgroup Investments has spent most of this year investigating the effects of sequence of returns by analysing the outcomes after 10 years of retirement across hundreds of scenarios and various portfolios. What she found in practice was that the order of returns is less important that the overall returns earned by a retiree. Furthermore, the traditional methods of reducing sequence of returns risk (for example, reducing exposure to growth assets and a number of the bucketing approaches) can actually lead to worse investment outcomes for retirees.

The below scenarios explain why this research is important to consider for any retirement plan.

1. The "worst case" – a perfect storm of sequence of return risks

Consider an investor who retired on 1 Jan 2008 just before the impending financial crisis. Say they invested in a high equity fund (which has about 75% in growth assets so has notable ups and downs) and withdrew what is considered a high income of 10% in the first year, growing this with inflation.

Assuming they had R1 million at the start of retirement on 1 January 2008, today (30 June 2022) they would have just under R300 000.

2. The "magic case" – a no volatility experience

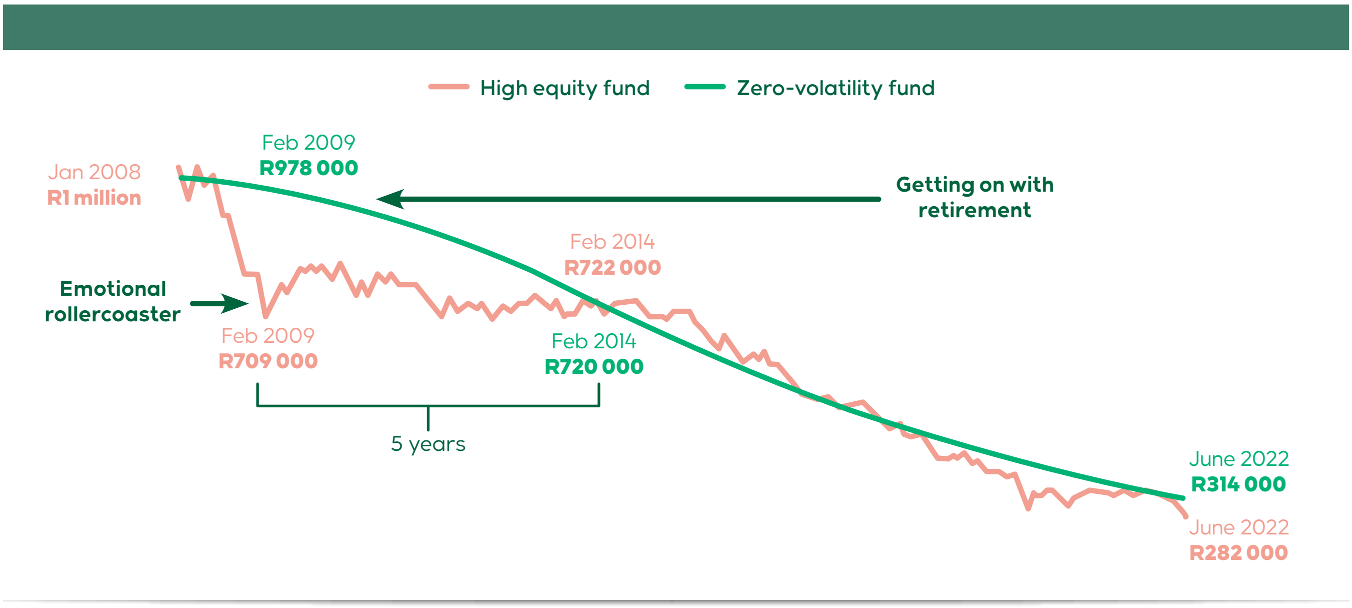
Now, imagine the same perfect storm example, but we had the magical ability to remove all ups and downs so that the retiree had absolutely no volatility but still earned the same average returns over the period. If they had R1 million at the start of retirement in 2008, today (30 June 2022) they would have just over R300 000. To be precise, they would have R32 019 more with a zero-volatility strategy - so not a vast improvement.

This small improvement was consistent in our research across numerous retirement dates for those who retired just before a market dip. However, for all other retirement dates, the Rand value 10 years into retirement of the zero-volatility fund was typically lower than a standard high equity fund.

Acknowledging the emotions experienced by investors

Although the outcomes of the 2008 perfect storm example are not that different, the journeys were drastically different, as illustrated by the chart below. Imagine how you would feel, if just over a year into your retirement you had lost almost R300 000 of the R1 million you retired with. Naturally, it would be very difficult to stay the course and not switch investments.

Rand value of R1 million invested on 1 January 2008 with an initial withdrawal of 10% with aim of income growing with inflation[2]



So, what strategies could be considered to help retirees stay the course? We tested two different strategies to see if they would help. The first is reducing the proportion of growth assets to reduce volatility and the second is called the bucketing method. Both strategies were tested for a range of different retirement dates going as far back as we have data for our high equity fund (i.e., May 2002). Each person retires with R1 million and withdraws an income of 10% in the first year, escalating this with inflation. For each retirement date, we tested how much money someone had left 10 years into their retirement. The first person retires on 1 May 2002, second person retires on 1 June 2002, and so forth, with the last person (number 123), retiring on 1 July 2012. The last retirement date is 1 July 2012 because 10 years into retirement take us to 'today' (30 June 2022).

Strategy one: Does reducing the proportion in growth assets help?

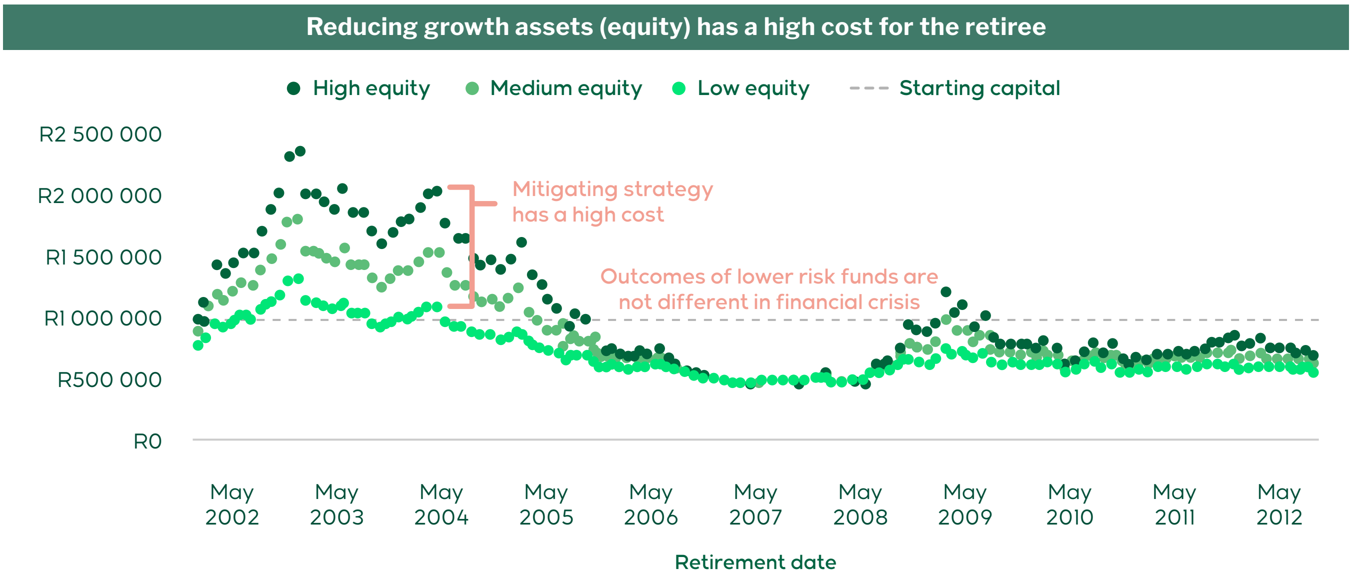
Each dot on the chart represents the money a retiree has left 10 years into their retirement. For each retirement date there are 3 different colour dots representing the three different funds. Across all retirement dates, a high equity fund gave retirees the same or more money 10 years into their retirement than a medium or low equity fund (i.e., dark green dots are above the light green and yellow dots).

> Reducing the proportion in growth assets did not improve outcomes in poor markets and was in fact very detrimental in good markets with retirees having up to R1 million less in a low equity fund than a high equity fund.

[1] Analysis is done on a living annuity so assumes a maximum drawdown of 17.5% per annum of assets

[2] Tested using Nedgroup Investments Core Diversified Fund Class C

Value 10 years into retirement of R1 million invested with an initial withdrawal of 10% with aim of income growing with inflation[3]



Strategy two: Does holding a few years of income in a 'cash' bucket help?

We tested a few bucket systems and only cover the most effective version here. The other variations did not improve outcomes in poor markets and were detrimental in good markets .

The most effective bucket system of the options considered was to place 3 years of income in a 'cash' bucket and the balance in a 'risk' bucket (high equity fund). Retirees withdraw income from the 'cash' bucket and never top it up so when it runs out, they withdraw their income from the 'risk' bucket.

On the chart below each dot represents the money a retiree has left 10 years into their retirement. We see a marginal improved in outcomes with bucketing for people who retireed and soon thereafter experienced a market dip. Importantly, in typical and good markets it didn't cost retirees too much i.e. they only had slightly less money after 10 years.

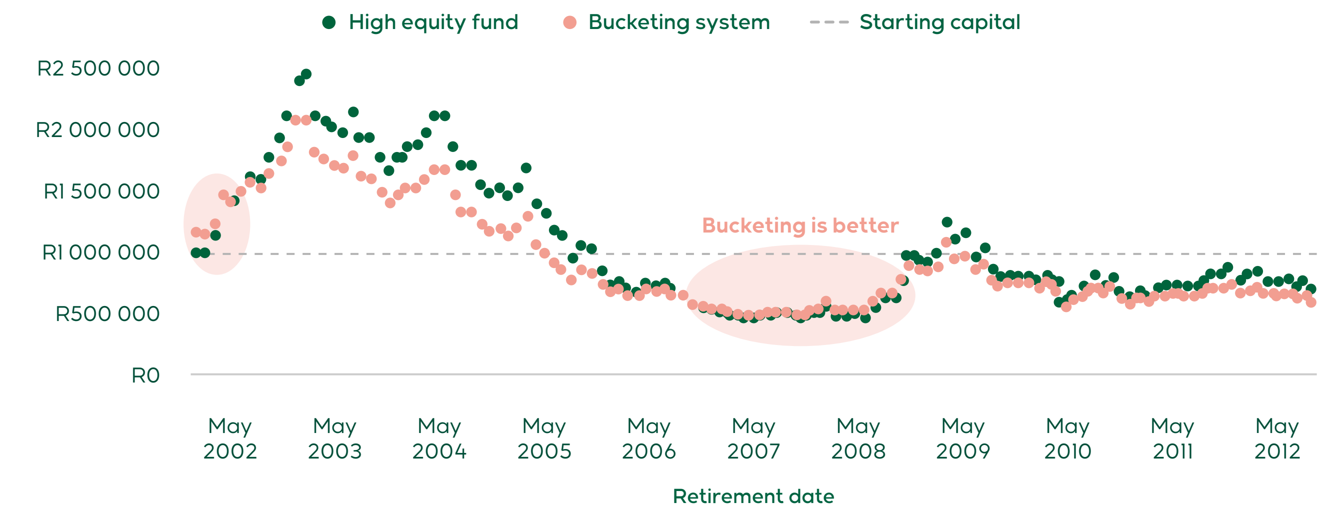
From the perspective of helping retirees stay the course, this is a good option in practice as it helped a bit in bad times, didn't cost too much in good times and psychologically provided reassurance of having a cash reserve in the early years of retirement.

[3] Low equity is Nedgroup Investments Core Guarded Fund C. High equity is Nedgroup Investments Core Diversified Fund C. Medium equity is a 50:50 blend of the Low and High equity portfolios.

[4] This includes the bucket system of placing 3 years of income into a 'cash' bucket and once a year topping the 'cash' bucket up from the 'risk' bucket. Each time it is topped back up to hold 3 years of income withdrawals.

Value 10 years into retirement of R1 million invested with an initial withdrawal of 10% with aim of income growing with inflation[5]

Rand value 10 years into retirement



To conclude, when it comes to living annuities and discretionary investments in practice, the order of returns earned by a retiree is not as important as the overall return earned over the period.

The 4 keys to a financially successful retirement are to:

1. Invest in sufficient growth assets (± 75%)
2. Keep total costs to a reasonable level as this erodes returns (preferably 1.5% pa or less)
3. Draw a sustainable income (preferably 5% or less in the first year, with income escalating with inflation each year)
4. Consider an effective bucket approach (avoid the bad ones) if this will help the retiree not to switch investments when markets returns are poor.

For more detail on this, get in touch with your Nedgroup Investments Relationship manager or visit nedgroupinvestments.com.

[5] Tested using Nedgroup Investments Core Diversified Fund Class C

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