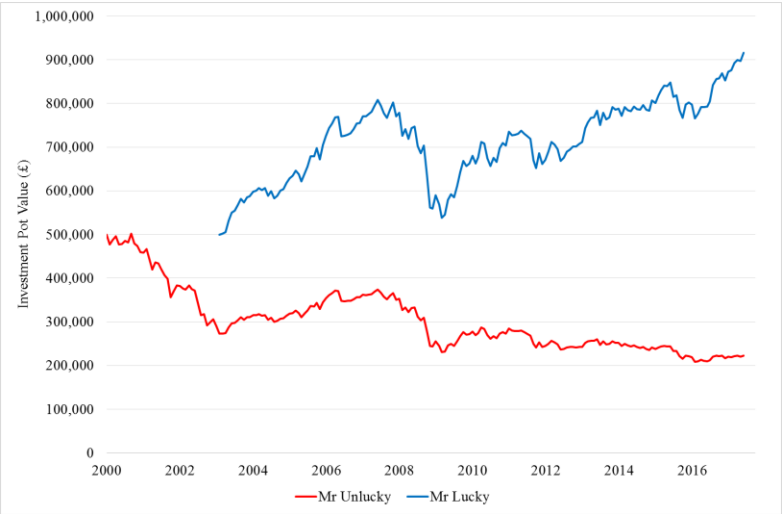
Alpha Beta PARTNERS

Defeating the sequence risk devil

Mention *Sequence Risk* in any university finance department and you will probably be met with blank stares. However, wealth managers know all too well how important this risk is. It refers to the order in which returns occur over time. The existence of sequence risk also means that accident of birth can have a big impact on an investor's experience.

Consider Chart 1. Mr Unlucky retires in December 1999, with a pension pot of £500,000 and starts to draw a regular pension of £25,000 from a typical UK equity and bond investment portfolio, represented here by the IA Sector Mixed Investment 40-85% average. By 2017 the pot has shrunk to just over £200,000. Mr Unlucky now feels very nervous. Meanwhile Mr Lucky retires with the same size investment pot, but in March 2003, and draws a regular pension of £25,000 from the exact same asset mix as Mr Unlucky. By 2017 Mr Lucky's pot is worth £900,000. What a lucky chap.

Investment returns determined by accident of birth



Source: Cass Business School

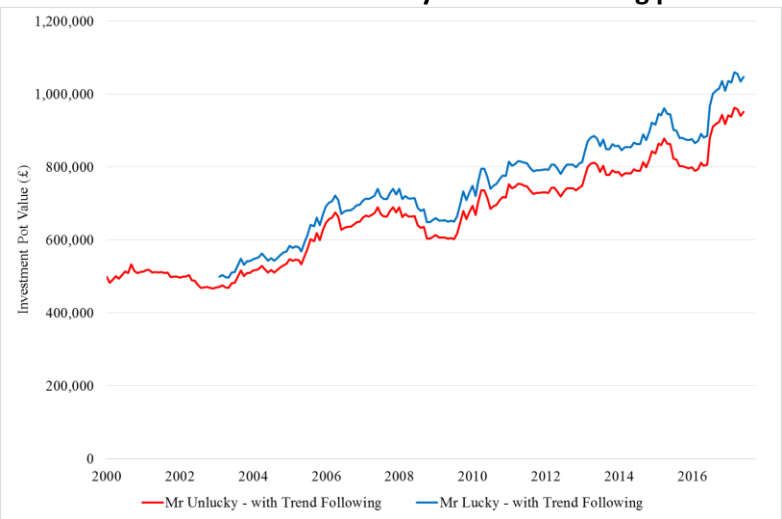
Both investors started with same amount of money, adopted the same investment strategy and drew the same annual income … but they ended up in very different places. It was the sequence of returns that made the difference. Experiencing a heavy loss at the start of the decumulation period as Mr Unlucky did was, well, what did for him.

Now, imagine the likely repercussions if accident of birth can play such a critical role to determine investment returns on, for example, DB transfers!

At Cass Business School we have been researching investment techniques that seek to minimise the most pernicious effects of sequence risk. We have found that simple trend following techniques, applied at a monthly frequency over long periods of time can help reduce the impact that accident of birth can have on investment returns. Essentially the trend following process involves investing in the risky asset – whatever it is – as long as that asset class is in a positive trend. When it is in a negative trend, one simply puts the capital assigned to that asset class into cash, until the asset class returns to a positive trend. The process is purely mechanical and involves no human discretion. It can be thought of as a built-in risk management process.

When we apply this simple process to the investment portfolios of Mr Unlucky and Mr Lucky, both investors get a very different experience as Chart 2 shows. The returns in Chart 2 have been generated with exactly the same parameters as those used to generate the returns in Chart 1, except that we have applied a simple trend following rule to each investment portfolio. Now Mr Lucky's portfolio is worth over £1,000,000 in 2017, while Mr Unlucky's is worth just over £950,000. Mr Unlucky should now consider changing his name by deed poll.

Investment returns smoothed by a trend following process



Source: Cass Business School

In Chart 2, both investors have benefited from the strong rally in equity markets over the latter half of the sample. But the application of the trend following rule also means that Mr Unlucky's portfolio managed to avoid the worst effects of the High-Tech Bubble collapse at the start of his decumulation journey, while both investors managed to avoid the ravages of the more recent Global Financial Crisis.

For those readers interested in learning more about these techniques we have published a series of papers on this topic*.

With more and more people taking responsibility for their own pension savings, either because they have never been in a DB pension plan, or because following advice they have decided to transfer out of their DB scheme into a DC investment vehicle, we believe that defeating the sequence risk devil should be the industry's top priority. We hope that our research will go some way to helping investors achieve that victory.

**Please send an email to rioghna.murphy@city.ac.uk to request copies of these papers.*

Do let me know if you would like to discuss this or any other topic.

A.Thompson, Alpha Beta Partners. February 2020.

T: 07968 934127 E: at@alphabetapartners.co.uk

Alpha Beta PARTNERS

 Alpha Beta Partners Ltd 73 New Bond Street London W1S 1RS info@alphabetapartners.co.uk +44 (0) 207 290 9490