# THE GOD PORTFOLIO

PART

I

Widen The Frame

December 2020

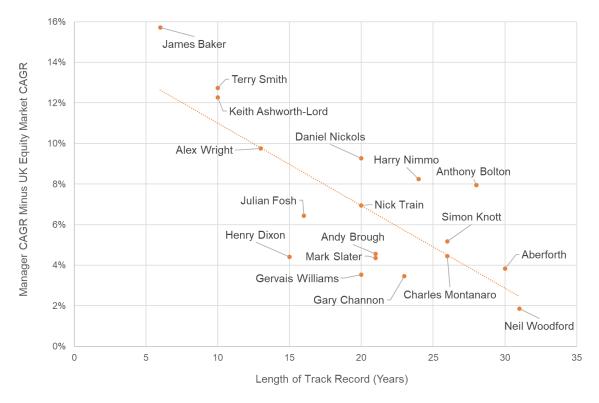
## THE GOD PORTFOLIO

#### PART I

Why Neil Woodford and Terry Smith mean we should 'widen the frame'; how God maximises returns while ignoring risk; and what chess can teach us about intuition.

### Welcome to the Elephant Graveyard

This chart features at the back of our investor presentation.<sup>i</sup> It shows the best publicly available track records that we could find in the UK equity market. Every year we update the chart and every year those updates confirm the message. The longer the track record, the closer the manager gets to benchmark performance (0% on the Y-axis). Neil Woodford's later investment performance is consistent with what we would expect from a top performing manager towards the end of their career. The data has a correlation coefficient of 77%.

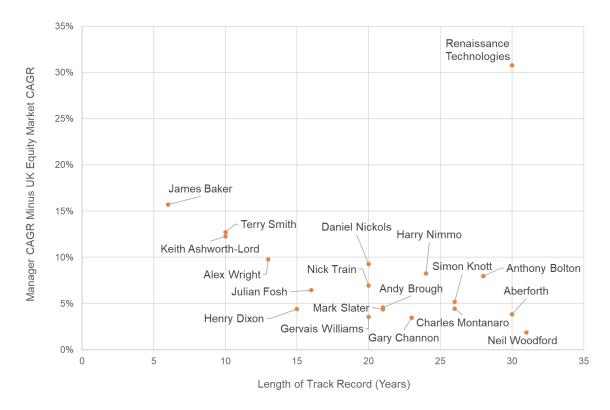


Explanations are various. For some managers it may be the drag of size on performance, for others it is style cycles, or changes in style. In a few cases it simply illustrates how important it is to have a lucky start.

Up next is the same chart but with the addition of the Renaissance Technologies Medallion Fund. Although rather outside of the UK equity benchmark, the point here is that a 39% net (66% gross) 30-year CAGR blows *any* benchmark (and the Efficient Market Hypothesis) out of the water. Jim Simon's team deployed machine learning techniques from the early '90s. From 2001 to 2013, Medallion's *worst* year was +21% net. This chart challenges us to think about the investment problem differently.

<sup>&</sup>lt;sup>1</sup> This chart has been compiled using a data sources including: Morningstar, Trustnet, Fact sheets and newspaper articles (the latter for Neil Woodford for the period 1988 - 2014 and Anthony Bolton for the whole period 1979 - 2007). The benchmark used is the FTSE All Share Index (total return) with the exception of Keith Ashworth-Lord and Charles Montanaro where FTSE All Share Index (price return) has been used. All performance periods are measured to 30 November 2020 with the exception of Anthony Bolton (31 December 2007) and Neil Woodford (31 May 2019). Although Neil Woodford was still the manager of the Woodford Equity Income Fund until 10 October 2019, dealing in the Fund was suspended on 3 June 2019. The chosen benchmarks may not be appropriate for certain strategies that have been included. The chart should be viewed as an estimate only.

ii Bloomberg Businessweek, 'The Unsolved Mystery of the Medallion Fund's Success', 12 November 2019



#### **The God Portfolio**

One way to flip up your thinking is to 'widen the frame' by looking beyond personal experience. Our approach is to imagine how God's UK equity portfolio would look. Generating omniscient insight required 210MB of .xlsb files, a few calls to the Refintiv technical helpdesk, and plenty of time spent chewing a pen while looking out of the window. The result is a list of the 'best' trades that we could have made in each of 670 stocks listed across the FTSE Allshare and AIM100 since October 2016, when our Fund launched.<sup>iii</sup>

If we define the 'best' trades as those with the highest CAGR, here is the top ten.

	Name -	Industry	Max Return  ▼	Start Price	Start Date	End Price	End Date	Episode (m)	CAGR ↓↓
1	Debenhams PLC	Diversified Retail	81%	1.55	25/03/2019	2.80	27/03/2019	0.1	1.69E+46
2	Flybe Group Ltd	Investment Holding Companies	293%	1.64	16/01/2019	6.44	23/01/2019	0.2	3.55E+30
3	Thomas Cook Group plc	Hotels & Entertainment	175%	4.47	30/07/2019	12.30	05/08/2019	0.2	2.38E+26
4	Vinaland Ltd	Collective Investments	200%	0.01	12/12/2018	0.03	20/12/2018	0.3	2.95E+21
5	Verseon Corp	Biotechnology & Medical Research	103%	1.48	09/12/2019	3.00	18/12/2019	0.3	1.88E+12
6	Interserve PLC	Professional & Commercial Services	162%	6.83	18/02/2019	17.90	05/03/2019	0.5	1102493036595%
7	Whitbread PLC	Hotels & Entertainment	54%	1,808.45	19/03/2020	2,790.43	26/03/2020	0.2	486769824865%
8	Bakkavor Group Plc	Food & Tobacco	83%	58.60	16/03/2020	107.40	26/03/2020	0.3	296373898087%
9	Hammerson PLC	Residential & Commercial REITs	216%	19.89	14/05/2020	62.90	03/06/2020	0.7	100065765334%
10	Tui AG	Hotels & Entertainment	109%	254.00	14/05/2020	530.40	27/05/2020	0.4	71641332974%

I hear a sharp intake of breath. The top six God trades are companies where, in the end, shareholders were effectively (or actually) wiped out. It appears that God swings pretty hard and with no regard for risk (although there is no risk if you're omniscient). It's also clear that the high annualised returns are primarily a function of very short holding periods rather than exceptional holding period returns. In first place, Debenhams' annualised return is the result of a holding period of two days. Given the potentially unforgiving nature of this approach, let's call it the *Old Testament* Portfolio.

iii Capital return calculations based on daily price data up to 16/11/20

Another way to rank the 'best' trades is based on the highest capital return over the holding period.

	Name 🔻	Industry	Max Return	Start Price	Start Date	End Price	End Date	Episode (m)	CAGR
1	Greatland Gold PLC	Metals & Mining	17900%	0.15	10/10/2016	27.00	18/09/2020	48.0	267%
2	Eurasia Mining PLC	Metals & Mining	15987%	0.23	13/12/2017	37.00	09/10/2020	34.4	489%
3	Synairgen PLC	Biotechnology & Medical Research	4138%	5.84	20/12/2019	247.52	19/08/2020	8.1	25643%
4	Games Workshop Group PLC	Leisure Products	2192%	500.00	03/10/2016	11,460.00	06/11/2020	49.8	113%
5	ITM Power PLC	Renewable Energy	2062%	16.57	14/02/2017	358.32	03/06/2020	40.2	151%
6	Future PLC	Media & Publishing	1889%	104.32	05/10/2016	2,075.00	11/11/2020	49.9	105%
7	Silence Therapeutics PLC	Biotechnology & Medical Research	1388%	41.00	26/03/2019	610.00	04/12/2019	8.4	4561%
8	Frontier Developments PLC	Software & IT Services	1345%	195.50	12/10/2016	2,825.00	06/11/2020	49.5	91%
9	Avacta Group PLC	Biotechnology & Medical Research	1343%	14.00	18/03/2020	202.00	26/05/2020	2.3	111717537%
10	Impax Asset Management Group PLC	Investment Banking & Investment Services	1126%	47.63	07/10/2016	584.00	09/11/2020	49.8	83%

You could have bought Games Workshop on the day our Fund launched for 500p and made 22x over 50 months. This approach seems much more forgiving, so let's call it the *New Testament* Portfolio.

There are some things that God can do because... they're God. Like flipping Flybe with perfect timing in the weeks before it goes bust, then doing the same with Debenhams and Thomas Cook. But the rest of us must consider risk as well as return. We introduce safety features to the God Portfolio by adding constraints. Sensible constraints could include introducing a minimum holding period and a maximum risk threshold. The standard approach to risk/return is to look at something like a Sharpe or Treynor ratio, or Alpha. Unfortunately, these metrics, rooted in Modern Portfolio Theory, are useless ('risk is the correlation between a share's historic price volatility and the benchmark's historic price volatility' say what!?). Fortunately, with the God Portfolio we know what happened next. This means that we can derive a forward-looking risk metric, such as the maximum drawdown within 6 months of the optimal sale point.

These constraints give us something divinely inspired but with its feet still on the ground. We'll consider this *Prophet* Portfolio in PART II.

#### **Grand Master Training**

The God Portfolio was inspired by chess. The first comprehensive encyclopaedia of chess moves was published in 1966. Originally a training tool used in Soviet Grand Master 'bootcamps', databases of chess matches are now a key resource for any serious player. A chess database expands the learning opportunity beyond those games that the player has personally experienced, allowing intuition (see our Broadside, 'We Are Not Odysseus', for a discussion of intuition in investing) to develop faster. By contrast, most professional investors build their expertise gradually, reflecting on their own investment decisions, and observing those around them. To me this is analogous to the world of chess in the first half of the twentieth century. Could it be that the professional investing community approaches the challenge of intuition with less vigour than a serious chess player?

This Broadside only really scratches the surface of the God Portfolio. By widening the frame, and sharing it with you, we hope you'll join us in trying to think about the investment problem differently.

Adam Rackley

Cape Wrath Capital

December 2020