

ROBOT AND I – DIARY OF A FUND MANAGER

10 Apr 2017

A week away in Wales without connection to the internet created space for reflection. The first quarter of 2017 is done and despite the uncertainties created by President Trump and Brexit, the wheels remain firmly on both the global economy and also here in the UK. Investors have made respectable returns, whilst those with cash continue to buy the dips. When the US market went up after the chaotic failure of healthcare reform and in recent days despite growing tension between the US and Russia, that is a signal worth paying attention to. As Newton said, 'I contrive no hypotheses.' He didn't know how gravity worked, it just did.

By a complete coincidence I was in Frankfurt on the day that Theresa May signed the Article 50 letter. From my hotel room I scanned multiple TV channels and found that all were filling time with comments about the unknowable course of the negotiations by those who don't know. Five minutes was about all I could take. The reason for my trip was to attend a conference about the impact of artificial intelligence (AI) on investment management organised by long-term networker, Fred Sage. The timing was perfect, as much has been said and written about this subject and now seems the right time to get stuck in to the truths, jargon, misunderstandings and false claims. What will the future hold for human influence in the world of investment? I will try not to impose too much self-interest into what follows, but rather report what I heard, interspersed with a few judgements.

To put things in perspective, manufacturing, which drove growth for 200 years, was overtaken by distribution in the 1960s and information in the 1990s. Microsoft was the big winner of this last stage. However, it's now the customer that is leading which is why Amazon, Google, Apple and Facebook are now so dominant. Google is the pre-eminent AI search engine. It provides us with access to the vast and growing intelligence of the internet. One of the speakers said that 90% of all data ever created was generated in the last two years which, although I can't check, sounds entirely plausible. One might think that we are just a few years away from creating something sufficiently 'smart' that it will know everything, but this won't happen because of the impact of unpredictability. The butterfly flapping its wings in Japan may sometimes cause a hurricane in Florida, but not always. AI is just as capable as we are at coping with unpredictability, remembering the past and learning from the present.

First judgement; Man plus machine will win against man without machine.

During a highly persuasive presentation from an investment manager who uses AI to manage portfolios, I began to feel that my days were numbered, but then rallied as it occurred to me that what he and his colleagues had designed was a two dimensional model, far removed from three dimensional reality. The approach described only applied to quoted securities and assumed that markets will always be liquid. In addition, the value of money was measured in nominal terms, with no acknowledgement of the impact of inflation. The final big assumption was that governments would continue to behave in a rational, pro-growth way and would not confiscate returns through taxation or by other means.

Second judgement; Successful investment is all about generating a real return over the rate of inflation whatever the circumstances. Just because something hasn't happened in the last 30 years doesn't mean that it won't in the future.

Moving immediately to judgement three; Robo-advisers are nothing to do with AI, but instead are an efficient way of running an investment business using conventional investment models based on the recent past. Robo-advisers' ability to withstand an unexpected event is questionable.

Later in the day came a thoughtful session which focused on the strengths and weaknesses of AI. The audience was left to draw its own conclusions. Undoubtedly, AI will become increasingly powerful, but is susceptible to creating artificial stupidity. 'Stupid in, stupid out', which is much the same as in the early days of computers when the phrase was 'garbage in, garbage out'. We need to ask AI machines the right questions if we are to learn something useful. A simple yes/no question may be dangerous, whereas yes/no/don't know may be better. Moving on to whether human intelligence has advantages that are likely to last, AI works in a linear way whereas we are modular, which means that we are better at making connections between unrelated subjects and we then challenge whatever conclusions we come to. Perhaps most importantly, trying to do the right thing, having values, isn't part of what existing AI systems can cope with and most likely never will.

Last judgement; We will have to decide whether or not to trust AI. This choice may be rational or irrational, but it is ours.

Much to ponder on, but the good news from my point of view is that there is no need to give up the day job just yet.