

The £64,000 Question:

How can you get the best return on your money?

Introduction

This paper aims to explore the ideas behind our approach to advising our clients on how they invest their money to give them the best possible chance of return. The topics discussed may be familiar to some experienced investors and new to others. The objective here is to set out what we have found from our research and experience and help you understand why we invest the way we do. The topics covered are:

- The investment world
- Diversification
- Risk
- Fees and charges
- Returns and measurements
- How to select a fund manager

Why should important decisions be based on the best evidence available?

"To understand the world as it is, not as we should wish it to be, is the beginning of wisdom" – Bertrand Russell

Before we look at the first subject, it is worth saying something about why we decided to document our investment philosophy. Investing involves making risk decisions, and the consequences of making a bad choice have implications. Investing wisely versus poorly can mean retiring comfortably and running out of money too early, and investing is high stakes. When making high-risk decisions, it seems only logical that we consider the best evidence available rather than relying solely upon our prior knowledge and perceptions.

The psychologists' Joseph Luft and Harrington Ingham created the Johari window, which is a tool for explaining that there are things we know we know, things we know we don't know and things we don't know we don't know. It is often the things we haven't been aware of when making decisions that are a risk to us. By reducing the number of gaps in our knowledge, the risk of errors in perception is diminished. The more we understand a subject, the better our decision-making process.

Ideas and knowledge develop in our minds as a consequence of our experiences. In philosophy, this is called empiricism. Testing our ideas and independently of our experiences provides us with "a priori" knowledge. In testing our ideas externally, we close the gap between what we believe to be true and what is true by means of experiment or externally verifiable data. This is the basis of scientific thinking. When it comes to investing, we feel that decisions about where to invest should be based on what we know to be true, rather than relying on what we believe to be true.

Our research and investment philosophy has been to close the gap for ourselves and our clients and influence how we select investments on behalf of our clients.

The investment world

In 1965 Eugene Fama wrote a landmark paper exploring his theory of random walk in stock prices. Fama won a Nobel prize in economics in 2013. In his 1965 paper, Fama introduced the idea of market efficiency into the way stocks are priced. The investment world is made up of many asset managers looking after money in the trillions on an institutional basis.

Retail investors, as you or I would be called, make up a very small part of the total amount of money being managed in various asset classes across the globe. These money managers trade with each other every day, and assets are continuously priced. This is what we understand as "the market". If you or I were to look at the FTSE 100 (the largest 100 companies in the UK) and track its movement over time, we would be looking at the history of price movements resulting from asset managers trading.

The asset managers are competing against each other to maximise profit for the fund they are managing. In 1965 when Fama wrote his paper, the level of information available and the speed it could be shared was very different to today. Today, asset managers have access to vast information almost instantly. When very little information was available, a manager could put their analysts to work to find a competitive edge, allowing them to spot mispricing of assets. However, it is arguably far harder today, as everyone has access to the same information. Today recruits also have similar university backgrounds, and general economic and investment theory is widely understood. You or I could look up any investment concept online for free. In the information age, competition between asset managers is tough.

What exactly are they competing against each other for?

Investing can be described as a zero-sum game; for one asset manager to win, another has to lose. As there are two sides to a trade, the other makes a loss for one to make a profit. Therefore, asset managers compete to be top-performing, but simple mathematics shows that not all of them can be.

William Sharpe, professor of finance at Stamford university and winner of a Nobel prize in economics, writing in 1991, stated that the performance of the average asset manager would be equal to the return of the market over any period observed. The paper titled "the arithmetic of active management" explains that the trading activities of asset managers produce stock market prices, and logically, the average performance of all asset managers will be equal to the market performance. Asset managers incur costs due to their activities; staff costs, analysts, research, data, dealing fees, stamp duty on stocks, business overheads, and not forgetting that they are run for profit – a margin on top. All asset managers bear these costs, so the average manager will underperform the market after these costs are deducted.

What does this mean for investors?

Investors must choose where to place their money to give it the best chance of return. Some funds exist that provide the market return at a low cost by tracking it rather than trying to profit from costly trading. These funds are known as "passive" investment funds, as they replicate the market return rather than trying to beat it. The costs of doing this are far less than trying to outperform the market. As the market return equals the average fund manager, these passive funds will exceed the average due to their lower cost structure. Instead, investors could try to find a top-performing manager to look after their money, but more on that later.

Diversification

The well-known metaphor goes, "don't put all your eggs in one basket". This fits so well with investing because, like dropping an egg, some investments within a portfolio will perform poorly. The consequences are reduced if they constitute a small part of a larger portfolio than if a more concentrated group of assets is held.

Diversification works for investors who spread their investments widely between different types of assets, stocks, bonds, property, and commodities. Even stocks can be diversified further into the UK, US, Europe, emerging markets. The greater the diversity, the less the risk. The benefits of diversification are simple and easy to understand.

Portfolio construction theory

Whilst the concept is simple to understand, building a diverse portfolio of investments is more complicated. Harry Markowitz is credited with creating modern portfolio theory, which identified a methodology of constructing portfolios for different investors. Markowitz won the Nobel prize in economics in 1990 for his work and contribution to the investment profession. In his career, he researched optimisation techniques that can be used to build portfolios of different assets for an investor. A key concept behind the theory is that diversification lowers portfolio risk for a given level of return. This theory allows us to construct portfolios at different risk levels, to meet the varying needs of investors. The ideal asset mix can be built by understanding an investor's "utility" or their needs for the portfolio. Behind this construction process is mathematical modelling called "mean variance optimisation". The modelling aims to produce portfolios with the highest potential return at each given risk level. One of the benefits of optimised portfolios is that their overall risk is lower than the sum of their parts.

The importance of diversification

A study in 1995 looking at long term portfolio returns across sizeable corporate pension plans concluded that portfolio construction was responsible for 93.6% of the total return. Stock picking or selecting funds to include in the portfolio accounted for 2.5% of the return, with the timing of investing accounting for only 1.7% of the return. Portfolio construction manages risk for investors and is the primary driver of returns. It surprises many investors to learn that the activities of investment managers account for very little, especially given the fees involved.

How investors access the benefits of diversification

If diversification is crucial for risk management and is responsible for most of the returns, investors and their advisers should spend more time on this job instead of trying to find star fund managers. The choices available to investors are investing in a portfolio fund, paying a financial adviser to recommend investments for them, doing it themselves, or working with a portfolio manager. With each of these options, the question which needs to be asked is, are the principles of portfolio theory and mean-variance optimisation being applied.

Invest in a portfolio fund

Investors can place their money into a wide range of funds into which are run as optimised portfolios. Usually, there are choices between whether investors require income or growth at a range of risk levels. Most investors could find a solution to meet their needs using portfolio funds. Some of these portfolios will contain strategies where fund managers are trying to beat the market, some will focus on tracking the market and a third class will blend the first two strategies. There are usually two layers of costs on these funds, the portfolio managers fees and the fees of any underlying fund managers they may have invested in. Some portfolio managers use their own in-house funds, which can reduce the total charges for investors.

Pay a financial adviser to recommend investments

Financial advisers are required to hold appropriate qualifications to recommend investments. They must also be authorised by the UK regulator, the Financial Conduct Authority (FCA). The FCA maintains a list of regulated activities, and depending on the level of qualification held; advisers will be able to carry out certain of these activities. Activities 4 and 6 covers "giving personal recommendations on retail investment products". Activities 14 and 10 covers "managing investments". The minimum qualification required to undertake activities 4 and 6 is a level 4 diploma in financial planning, and most advisers hold the very minimum. Activities 14 and 10 require a higher level, often post-graduate qualifications, which contain the specialist knowledge required to manage investments.

This is where the regulation is an odd shade of grey. Can an adviser with the minimum qualification build a diversified portfolio for you? According to the regulator, yes. However, unless they have chosen to outsource this to an expert, can you be confident they will have the required depth of knowledge to do the job correctly. Without the necessary expertise, there is a risk that investors are left holding sub-optimal portfolios and potentially taking more risk than they are comfortable with or missing out on returns.

It may come as a surprise to learn that many qualified financial advisers do not have the expertise to construct an optimised portfolio for investors.

Do it yourself

Unfortunately, the required tools and technology are not yet available to investors to construct and manage their portfolios. Even if they were, there is little to be gained overusing the expertise of a portfolio manager or portfolio fund. The cost of portfolio funds has been driven down where passive investments are used, and many investors will find that the costs they incur are less than the cost of their own time, plus the risk of making errors is removed.

Work with a portfolio manager

Portfolio management is a service that clients can use to manage their money. Portfolio management companies usually produce a range of model portfolios at different risk levels, return profiles and a choice between growth and income. For investors who require something more bespoke, some portfolio managers will construct an optimised portfolio according to the individual investor's needs. Again, like portfolio funds, there is a cost for the manager, and there may also be costs for any underlying funds they select. Trading and dealing costs may also be incurred where the manager invests directly into stocks. However, investors can be confident in the portfolio managers expertise as they must hold qualifications that allow them to undertake regulated activities 14 and 10.

Risk

Investors must become comfortable with risk to be successful. Until Amos Tversky and Daniel Kahneman published their paper "belief in the law of small numbers" in 1971, it was widely assumed that investors were rational. Daniel Kahneman won a Nobel prize in 2002 for his work with Amos Tversky on the psychology of how people behave when making statistical or risk decisions. Their work influenced economic thinking and the field of behavioural finance has a vast influence on investment management.

If investors are not rational, then what are they?

Two key findings relevant from Kahneman and Tversky's work are; investors are loss averse, and the use of heuristics (or mental shortcuts) leads to mistakes. The theory of loss aversion comes from the 1979 paper "prospect theory: an analysis of decision under risk". The finding from prospect theory is that when investors choose to take a risk to make a gain, they are risk-averse. Whereas, when faced with a choice leading to losses, they will take more risk. At the time of the study, it was a surprise to see that investors would take more risk to avoid a loss than they would with an equal gain. That indicates investors are overall tilted towards avoiding losses, however, in the experiment, that led to irrational decision making.

The concept of heuristics, or mental shortcuts, is summarised in Kahneman's book "thinking fast and slow" as system one and system two thinking. The idea is that when faced with decisions, we either make quick decisions using behavioural biases, or we take longer to decide using more rational thought processes. There are many behavioural biases now known in psychology, and they pose a problem for investors. The gap between professionally managed and amateur investor portfolios has

been evidenced at 4% per annum. This gap has been called "the behaviour gap". One reason for it existing is that investors make mistakes and errors in judgement, usually over trading and poorly trying to time when to invest. The cost of these errors compounds over time, leading to poor performance. Professional fund managers are not immune from the same behavioural errors; however, they are more likely than amateurs to implement disciplined strategies that reduce the number of mistakes.

How to know how much risk to take

Some strategies allow investors to reduce the risk they are exposed to, like diversification. The length of the time an investment is held reduces risk, as there is greater certainty of returns over the longer term than in the short term. As of September 2021, research by JP Morgan showed that since 1950, 1-year returns on US large-cap equities have ranged from -43% to +61%. Over 20 years, the annualised returns have varied between 4% and 18%. Taking a long-term view reduces the risk of losses. The investor's experience and understanding of investing and a psychometric test can be analysed using risk profiling technology. On average, investors may be loss averse; individuals vary widely, with some being more averse to losses than others. Risk profiling technology can help investors understand their personal preferences. By gaining a greater understanding of their preferences, investors and their advisers can select investments that meet their requirements.

Risk profiles do not remain stable and change across an investor's lifetime. As returns are more uncertain in the short term, investors should consider taking less risk as they reach the age where they will need to use their money, typically retirement. Younger investors have more economically active years ahead of them, so they can afford to risk more significant losses. Older investors become more loss-averse as their number of financially active years reduces. Risk profiling also needs to be considered alongside the broader objectives of an individual investor. Once agreed upon, the risk profile will influence the selection of investments within an optimised portfolio. The aim is to maximise returns at a given risk level.

Fees and charges

We have established so far that the activities of fund managers incur costs and that, on average, this means that most underperform the market. Investors may incur other potential fees that they need to be mindful of. Investors' costs to have their money managed add up over time. For example, if you were charged 2.1% per annum, saving £6,000 a year for 30 years and achieved a 7% return each year, you would have made £398,269. If your fees were reduced from 2.1% to 0.8%, you would have an extra £120,278 at the end of 30 years.

How to reduce the costs you pay

How could it cost 2.1% per year to manage your money to expand the example slightly further? Assume that you engage the services of a financial adviser to "give personal recommendations on retail products" at a charge of 1% per annum on your total investments. Your adviser recommends you use the services of a platform to hold and administer your assets at the cost of 0.3% per annum. That leaves 0.8% per annum, which in this example is the average cost of the actively managed funds the adviser has recommended.

Platform fees

Platform fees are somewhat of a necessity, as they allow investors to gain access to a wide range of investments and facilitate adding and withdrawing money. Several platforms have varied features, and their charging structures differ to a degree. When you engage a financial adviser to recommend investments, they must consider which platform is best for you. Ultimately, the platform is there to do a job, so the cost will be a key consideration if the platform meets your needs. Some financial advisers

are restricted in their choice, which affects their ability to choose which platform to use and the costs you incur. This is why an independent adviser should be chosen over a restricted adviser.

Fund manager fees

Fund manager fees are higher if trading and trying to beat the market is their strategy. Alternatively, investors can choose funds that provide the market return at a low cost. These costs can be as low as 0.03% per annum (iShares Core S&P 500 ETF). In our example, our investor's adviser has decided not to use active fund managers to give their clients' money the best possible chance of performing well. They have selected a portfolio fund at the cost of 0.22% (Vanguard LifeStrategy 60% Equity Fund). Our investor has reduced their fund fees from 0.8% to 0.22%, which over 30 years will return £56,906. As the average manager will underperform the market, this strategy reduces risk and increases returns for the investor.

How should financial advisers be paid

In our example, the cost of the financial adviser over 30 years at 1% each year adds up to £89,277. Reducing the fees paid to the adviser will enhance returns for the investor. In our view, percentage fees work perfectly well for platforms and fund managers, but advisers should charge a fixed fee for their work.

Financial advisers add value by helping the client select investments, work out their risk profile, recommend suitable tax wrappers and find ways to help the client save and make money. Financial planning is different from financial advice and involves services like cash flow planning and assisting clients to work out a broader strategy for their money. An advice firm can provide financial planning and advice for a fixed cost.

As most financial advisers are not qualified to "manage investments", they shouldn't charge fees like asset managers do. Asset managers charge a percentage of funds invested, allowing investors at different levels of wealth to invest. Fixed prices for asset managers would create a barrier to entry and mean many would lose the benefit of investing. It means that investors with more significant balances will pay more, but that is a consequence of having economies of scale. The problem of percentage charges for financial advisers is that as the investor's fund grows, so do their adviser charges. However, there is no evidence that the adviser has more work to do for those fees. Given they are not responsible for the performance of the investments, they shouldn't be rewarded for it.

A fairer way

Financial advisers provide a service to their clients, and the fairest way of charging for that is through fixed fees. For another example, if £250,000 was invested for 20 years at an adviser charge of 1% per annum and a growth rate of 7%, the total charges would be £165,625. If the same advice service were charged at £2,400 a year, increasing by 2% a year with inflation, the total costs over 20 years would be £58,313.88. The same service can be provided to the investor, except with a fixed fee adviser, the investor would have an additional £107,311 in their portfolio.

Although £58,313.88 may still seem like a lot of money to pay a professional over 20 years, they can add value in many ways, through helping you make financial plans, find tax savings or helping you make better decisions that reduce the "behaviour gap". The cost of a loss of 4% growth over 20 years in this example is £515,877, which puts the value a trusted adviser can add for their fees into context.

*calculations were made using Candid Money's Fund Charges Impact Calculator, assuming a 7% growth rate and no initial charge.

<http://www.candidmoney.com/calculators/investment-charges-impact-calculator>

Returns and measurements

To investors, it seems preferable to compare two different investments by how they have performed in the past. In these comparisons, it is easy to assume that the one with the higher return is better. However, this assumption is not accurate.

Risk versus return

A better question to ask is, "how much risk does each contain?". A standard measure of risk is volatility. More volatile investments see more significant movements in their values, and when markets are falling, they often fall further than lower volatility investments. Jack Treynor, William Sharpe, John Linter, and Jan Mossin are credited with creating the capital asset pricing model built upon Harry Markowitz's earlier work on modern portfolio theory. The capital asset pricing model is a tool for security pricing, but it also tells us to expect that risk and returns are positively correlated. The more risk an investor takes, the more they can be expected to be compensated in return.

Risk/return ratio

When comparing two investments, without knowing something about the risk of each, the returns only contain half the story. If two investments yield similar returns, the better investment is the one that took less risk. We need to understand the ratio between risk and return to compare investments. When investors choose an investment strategy that will provide them with the market return, like a passive fund, they also take on the market risk. Fund managers who are trading to beat the market will take different levels of risk as they implement their strategies. Some will achieve high returns due to taking higher risks, which leaves a question about whether their investors agreed to or were comfortable with the additional risk. In most cases, investors would be happy seeing their investment balance increase, but what if markets had fallen and that additional risk meant they saw higher losses? Some managers will have taken risk which hasn't paid off, producing low returns for investors.

The problem of induction

The problem of induction is a philosophical question put forward by Scottish philosopher David Hume in the 18th century. Based on our observations, the question asks what justification is there for presupposing that things will turn out in the future as they have done in the past. At one point, it was believed that all swans were white until the first black swan was seen. We can apply this in the investment world to the well-known disclaimer, "past performance is not a guide to future performance".

Take the question, "will the sun rise tomorrow?", how would you answer that? It is not sufficient to say because it always has. You could also say something about physics and the earth's rotation around the sun, but that still would not answer the question. Suppose that a meteor hit the earth sometime this evening and stopped or slowed the earth from rotating; would the sun rise tomorrow? The probability of that happening is low, but not zero. Over many decades, investors have dealt with numerous financial shocks caused by events unknown before them. In the last 100 years: the wall street crash 1929, great depression 1937, flash crash 1962, oil price rise/miners strike 1973, black Monday 1987, early 1990s recession 1990, sterling was withdrawn from the European exchange rate mechanism 1992, dot-com bubble bursts 2000, September 11 2001, war with Iraq 2002, credit crisis 2008, European sovereign debt crisis 2010 and Covid-19 2020. These events happen without warning, yet a narrative of how they happened and who could have predicted them is usually created after the event.

This problem of making predictions based on observations about the past is one investors need to be aware of. The greater the number of observations, the more likely our predictions are correct, but we still can't avoid the black swan. If we compare 1-year market returns since 1950, the range was between -43 and +61%, whereas over 20 years, the range was between 4% and 18%. Over the longer term, we can be more confident of return, but never 100% certain. This data looked at rolling periods, which are 1950-1970, 1951-1971, 1952-1972, etc. This captures every 20-year term since 1950, which means that if the range of annualised returns was between 4% and 18%, there were no 20-year periods where markets did not produce a return. Given the regular but unpredictable occurrence of events that cause markets to fall, it is reassuring that a positive return was achieved over every 20-year period. For example, the worst 20-year period since 1950 still produced a 4% annualised return. £10,000 invested for 20 years at a 4% growth rate would yield £21,911, more than double the initial investment. Investors can have far more confidence investing for the long term than the short term.

How investors need to think about returns

The best approach investors can take is to determine what return they need to reach their objectives. Once that is known, it may be possible to construct an optimised portfolio at the lowest risk level. If the return required is too high, the investor will need to consider whether their plans are workable without taking other actions, like increasing the amount they save or extending the investment term. This can be worked out with a financial planner. Through risk profiling, investors and their financial planner will also consider whether the risk required to obtain the return is within the range they will be comfortable with.

Investors should consider taking the least amount of risk to achieve their objectives. Financial planning can help investors understand this and when to take risk, and when to reduce risk. This seems counterintuitive to the idea that the best investments are the ones that yield the highest returns, but for investors, making sure they achieve their plans is far more critical.

How to select a fund manager

This final section considers whether there is any possible strategy for identifying those managers who outperform the market after their fees have been deducted. According to modern portfolio theory, the performance of fund managers is subject to normal distribution, which is more commonly recognised as the bell curve. If you can picture a bell shape on a graph, it is fat in the middle and tails out towards the left and right. That demonstrates that most asset managers are average or slightly above and below. A small number of managers perform very poorly and a small number highly.

In statistical terms, 67.5% of fund managers will be around the average, which is our "fat middle" in our bell curve. Of the 32.5% left, half will be our underperformers and outperformers.

The pool of high performing managers is a meagre 16.25%. Out of this handful of managers, even fewer can replicate their performance year after year. Some of the high-performing managers will be lucky rather than skilful each year. There have been studies that have suggested that fund manager performance may not always be normally distributed. However, they still show that the number of high performing managers is far lower than the number of average managers.

Standard & Poors Indices versus Active (SPIVA)

So far in this paper, we have established that arithmetically the average investment manager will underperform the market after fees, it is difficult to tell whether an above-average managers returns are due to luck or skill and that short term performance is of no use to us in making predictions. The research SPIVA undertake compares the performance of active managers to benchmark indices (the market) over time. The theory this paper has discussed so far is backed up by evidence in SPIVA's research.

In December 2015, there were 1121 actively managed funds investing domestically in the US whose returns were higher than the market. A year later, only 317 of those remained. After two years, that number fell to 109, and by four years, only 43 of 1121 at the start remained. This tells us that finding fund managers who perform consistently is far from easy. A mere 3.8% of the total could replicate their outperformance over four years. What level of success would an investor or adviser have if they selected funds based on their performance the previous year?

Research into the longer-term performance of asset managers by SPIVA shows that over one year, 41.8% of Large-Cap funds outperformed the S&P 500. Over three years, that number falls to 32.36%, over 5 years, it falls to 27.33% and over 10 years 17.49%. This is consistent with the theory we have established so far. Similar findings occur across other global markets where the research has been applied.

The longer the investment term, the lower the probability of a fund manager outperforming the market after fees.

Validity of SPIVA research

A problem investors face when assessing the performance of active managers over time is inaccurate reporting of results. History is told from the point of view of the winners, the losers story doesn't often get heard. The same is true with measuring fund managers. There are indices which measure the average performance of fund managers. To look at an example, the Investment Association Global is an index which currently represents 478 funds managing equities globally. We have compared the performance of this group with the MSCI world, which represents the market return. Over 20 years, the IA Global produced a total return of 343.70% and the market 407.61%. The market is still higher, but we are not seeing the wide difference the SPIVA data would expect us to see. The reason for that is due to survivorship bias.

The performance of the IA Global represents the backdated returns of the 478 current members, meaning that the fund managers who have failed and gone out of business, or merged with competitors, are not included. We would expect that the managers who have failed are more likely to be in the category of worst performers, so by excluding them from the calculation, the average performance is dramatically increased. For investors, this causes a significant difference between what is perceived to be true and what is actually true. SPIVA are aware of this misrepresentation of the data and have accounted for it in their research. Therefore, we believe that SPIVA's research and findings are far more valid than benchmarks of the performance of active managers would lead us to believe. As William Sharpe put it in his 1991 paper, "properly measured, the average actively managed dollar must underperform the average passively managed dollar, net of costs. Empirical analyses that appear to refute this principle are guilty of improper measurement".

Identifying above-average managers

Although the research shows that most fund managers underperform over the long term, that doesn't change the fact that there are a few who can outperform. However, after many observations, we only know who the top performing managers are in hindsight.

We can't tell who is at the start of their 20-year career as a high performer, which means that if we choose to invest with fund managers, we will constantly need to monitor them to make sure they remain in the pool of outperformers. As that pool shrinks every year, it becomes less likely that the manager will remain a high performer with each passing year. How will we know when to change them? If all we have to monitor their performance is past results, then we have no reliable monitoring method to tell us what will happen in the future. This means we may only know to change them when it is too late. If a poor performing period is observed in the short term, the problem of induction applies to leave us with a dilemma to change manager or not, without knowing how it will turn out. The cost of monitoring, the losses incurred through poor performing periods before the change and the cost of change carry more risk to investors than buying a passive fund and obtaining the market return.

Passive funds are the Smart choice for investors

The mathematics behind fund manager performance summarised earlier in this paper stated that the average manager's performance would equal the market performance. We know investors can obtain above-average returns simply by buying a passive fund that will provide the market return at a low cost. By guaranteeing to be above average, the risk of picking an average or underperforming manager is eliminated. Logically, on the balance of probability alone, selecting a low-cost fund that will track the market will give most investors the best chance of return. The odds of success are not in their favour for those who decide to choose a fund manager in the hope they will outperform the market after fees.

This doesn't dispute the fact that high performing managers exist; they do. We won't know who they are until years of monitoring have determined whether they were skilful in their decisions or lucky. The best choice for investors is to avoid active fund managers altogether.

Discussion

This paper aims to summarise our research and investment thinking so that our clients can understand how we help them choose where to invest. In this paper, a broad range of areas has been covered in sufficient depth to support the reader to draw their own conclusions. Many Nobel prize winners have been mentioned in this paper. It is worth noting that all, and many other credible experts, have concluded that most investors will benefit from avoiding actively managed funds for the reasons in this paper. The most successful active investment manager in history, Warren Buffett, has voiced the same opinion on more than one occasion.

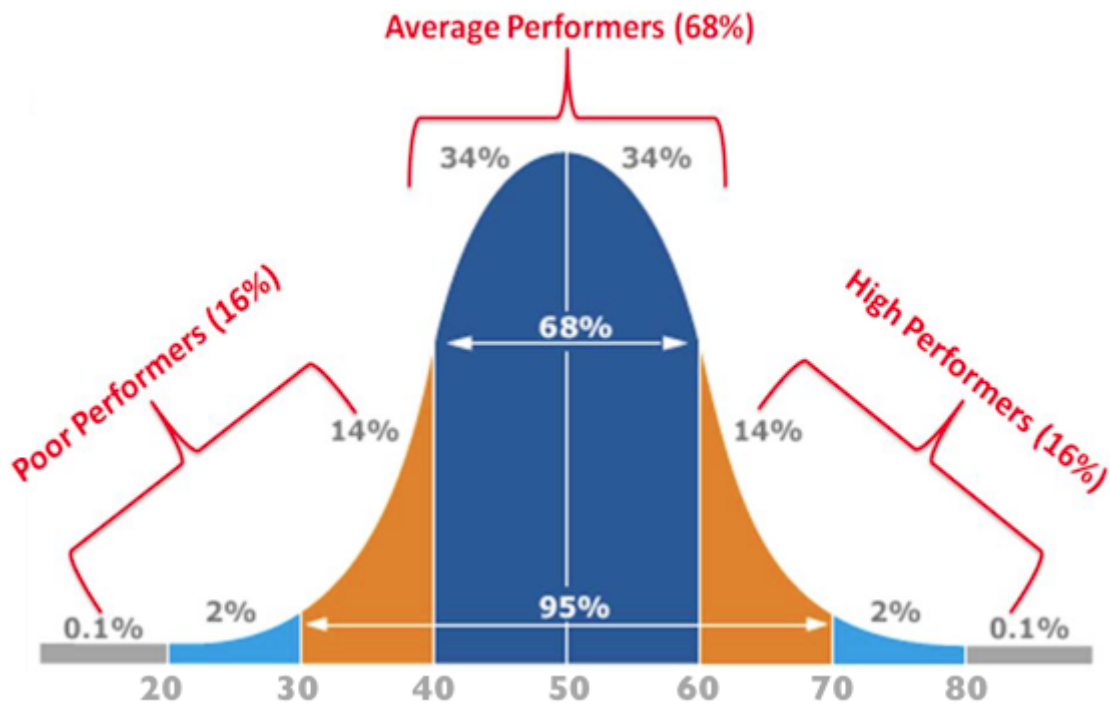
From what we have learned in this paper, we have summarised our thinking into a set of principles that guide how we invest for our clients.

Our Principles

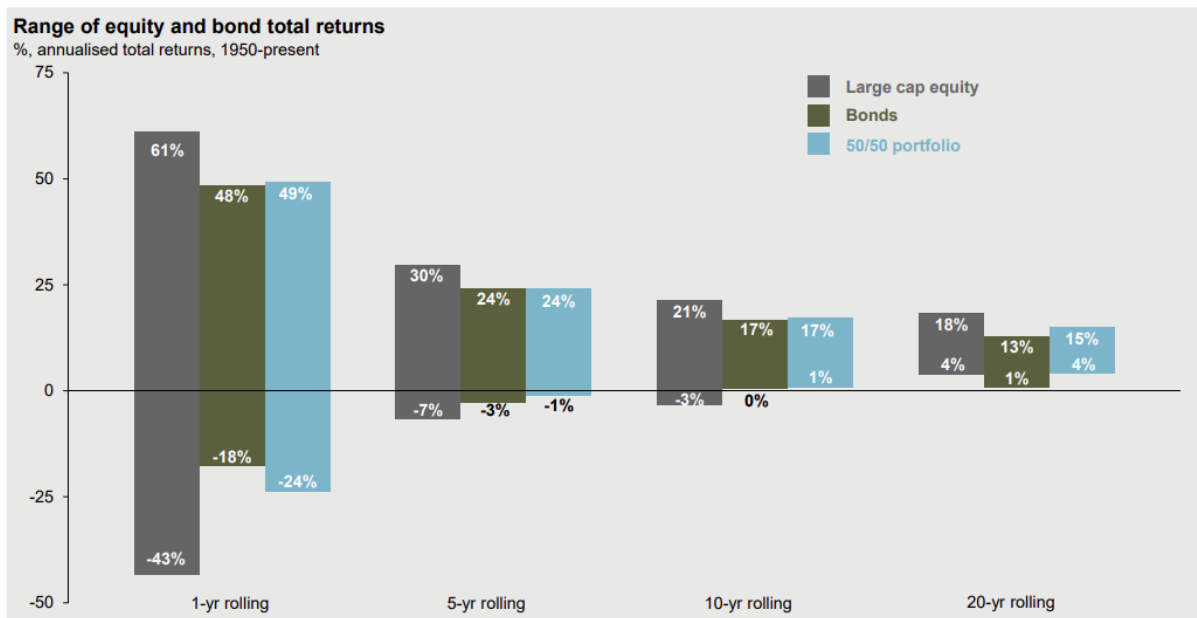
1. Evidence shows diversification works, and we will seek to diversify our clients' investments according to the principles of modern portfolio theory
2. We will outsource portfolio construction to portfolio managers, portfolio funds or use portfolio construction technology where we cannot to ensure our clients hold optimised portfolios at a risk level they are comfortable with
3. We will use the best risk profiling technology we can obtain to help our clients understand their risk profile
4. We will seek to reduce overall costs for clients by obtaining platform savings where we can
5. Our fees will be fixed; we will not charge a percentage of our client's funds for any work we do
6. We will only select portfolio managers and portfolio funds who avoid using active managers. Where we construct portfolios using technology, we will only use low-cost funds which provide the market return
7. We will add value to our clients through financial planning alongside financial advice, helping them make plans and decisions, invest wisely and avoid costly mistakes

Appendices:

1.

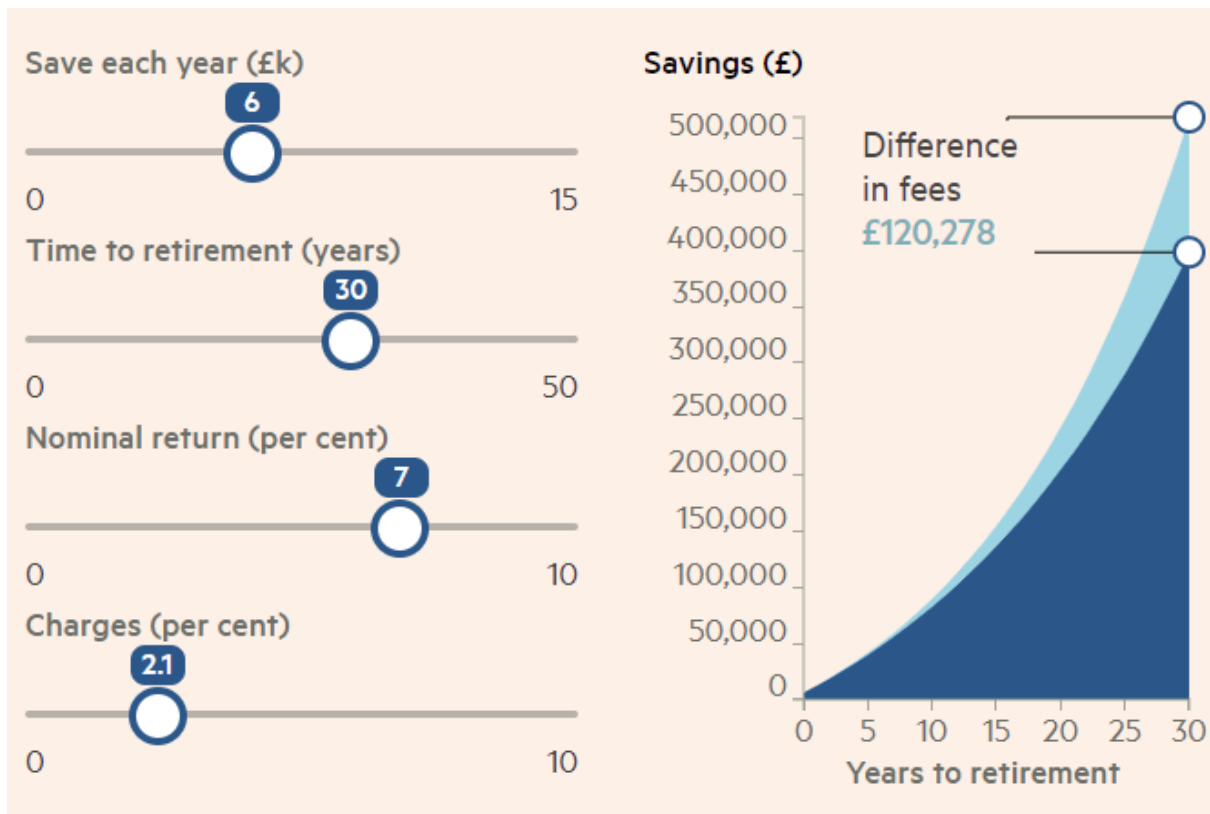


2.

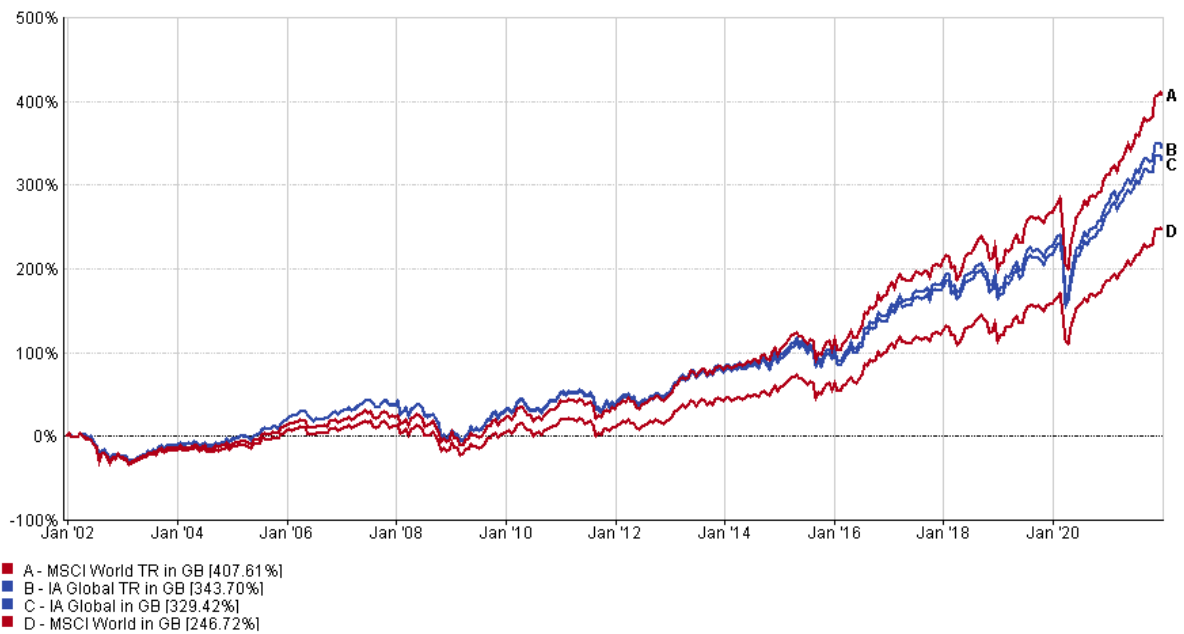


Source: Strategas/Ibbotson, J.P. Morgan Asset Management. Large cap equity represents the S&P 500 Composite and Bonds represents the Strategas/Ibbotson US Government Bond Index and US Long-term Corporate Bond Index. Returns shown are per annum and are calculated based on monthly returns from 1950 to latest available and include dividends. Past performance is not a reliable indicator of current and future results. *Guide to the Markets - UK*. Data as of 30 September 2021.

3.



4.



21/12/2001 - 23/12/2021 Data from FE fundinfo2021

References:

- Bird, R.; Gallagher, D. R. (2002). The evaluation of active manager returns in a non-symmetrical environment. *Journal of asset management*. 2(4), pp. 303-324
- Brinson, G. P.; Hood, R. L.; Beebower, G. L. (1995), Determinants of Portfolio Performance. *Financial Analysts Journal*, 51:1, pp. 133-138
- Crosby, D. (2018). *The behavioural investor*. Hampshire, United Kingdom: Harriman House
- Dynamic Planner. (2021). *Risk profiling*. Dynamic planner. [Online] [Accessed on 21 December 2021] <https://www.dynamicplanner.com/risk-profiling/>
- Financial Conduct Authority. Appendix 4: appropriate qualification tables. Release 13, updated November 2021. Accessed online 21/12/2021. <https://www.handbook.fca.org.uk/handbook/TC/App/4.pdf>
- Fama, E. 1965 "Random Walks in Stock Market Prices"
- Fama, E.; French, K. (2010). Luck versus skill in the cross-section of mutual fund returns. *The journal of finance*. 65(5) pp. 1915-1947
- French, C. W. (2003). The treynor capital asset pricing model. *Journal of investment management*. 1(2) pp. 60-72
- Global market insights strategy team. (2021). *Guide to the markets UK Q4 2021*. JPMorgan. [Online] [Accessed on 21 December 2021]. <https://am.jpmorgan.com/content/dam/jpm-am-aem/global/en/insights/market-insights/guide-to-the-markets/mi-guide-to-the-markets-uk.pdf>
- Kahneman, D., 2011. Thinking fast and slow. Great Britain: Allen Lane
- Markowitz, H.M. (1959). *Portfolio Selection: Efficient Diversification of Investments*. New York: John Wiley & Sons
- Luft, J.; Ingham, H. (1955). "The Johari window, a graphic model of interpersonal awareness". *Proceedings of the Western Training Laboratory in Group Development*. Los Angeles: [University of California, Los Angeles](https://www.ucla.edu/).
- Rovnick, N.; Haslett, B.; Jackson, G.; Stabe, M. (2016). *Calculate the hidden cost of fund fees*. Financial Times. [Online] [Accessed 21 December 2021]. <https://iq.ft.com/sites/isa-calculator/>
- Sharpe, W. (1991). The arithmetic of active management. *The Financial Analysts' Journal* Vol. 47, No. 1, pp. 7-9
- S&P Dow Jones Indices (2021). *SPIVA*. S&P Global. [Online] [Accessed 22 December 2021] <https://www.spglobal.com/spdji/en/research-insights/spiva/>
- Tversky, A.; Kahneman, D. (1971). Belief in the law of small numbers. *Psychological bulletin*. 76(2) pp. 105-110
- Tversky, A.; Kahneman, D. (1979). Prospect theory: an analysis of decisions under risk. *Econometrica*. 47(2) pp. 263-292



Get in touch

Find out how we can help you.



02039 871782



info@grey-parrot.co.uk



www.grey-parrot.co.uk



Grey Parrot Financial Planning

57-61 Mortimer Street,

London, W1W 8HS