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GUIDE TO INVESTMENT STRATEGY

How to understand markets, risk, rewards
and behaviour

Third edition

Peter Stanyer

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To Alex

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This book aims to help inform the process of seeking and giving professional advice, but it cannot be a substitute for that advice. It draws on and summarises research and investor perspectives on a wide range of issues, but it is not punctuated with footnotes citing sources for facts or opinions. Although important areas of debate are flagged with references to leading researchers, in other areas ideas which are more commonly expressed are presented but not attributed. Sources which were particularly important for each chapter are listed in Appendix 4.

Please note that the views expressed in this book are my own and may not coincide with the views of the investment funds on whose boards or committees I am honoured to serve.

In conclusion, let me say how privileged I am that Elroy Dimson, Emeritus Professor of Finance at London Business School, has agreed to write a foreword for this third edition of the book. Although my appreciation of markets owes a great deal to the economics that I learnt at Cambridge University, particularly from the late Michael Posner and from Michael Kuczynski at Pembroke College, the London Business School's Investment Management Programme gave me an invaluable bridge from economics to modern finance.

Foreword

INTEREST RATES HAVE COLLAPSED. Savers who put aside money now, to spend in the future, will earn little by way of interest. To accumulate a target lump sum, they need to save more than they once planned. Retirees, who wish to live on their savings, can now expect to receive a smaller income from their investments. They must adjust to having less to spend than they expected.

Of course, low interest rates and low bond yields were for some time clear for all to see. It was less obvious that low interest rates imply low prospective returns on all assets, including equities. Because investors require some compensation for the higher risk of the stockmarket, equity returns must be equal to the interest rate plus a “risk premium”. It follows that, other things being equal, a world with low interest rates must also be a world in which stockmarket investors receive lower returns.

What are the implications of this dramatic change in the financial environment? Peter Stanyer’s response is that every saver needs a coherent investment strategy. Strategy must be underpinned by an understanding of how markets move, how risk should be judged, how markets reward investors and how investors behave. In this third edition of his outstanding book, Peter Stanyer addresses these issues and elegantly surveys the entire field of investment.

He helps us to formulate an investment strategy that is realistic. The projections made by many asset managers, retail financial product providers, pension funds, endowments, regulators and governments are optimistic. Overly optimistic estimates of future returns are dangerous, not only because they mislead, but also because they can mask the need for action.

Investors vary in their need for liquidity, their tolerance for risk, and their capacity to follow a disciplined investment strategy. They therefore need to devise a strategy that reflects their salient characteristics. The strategy should be founded on three pillars. The first pillar is financial theory – how financial markets can be expected to behave; the second is empirical evidence – how markets actually do behave; and the third is the investment environment – the current condition of financial markets.

Peter Stanyer reviews the relevant aspects of financial theory in a highly accessible way. He extends our knowledge without resorting to complicated mathematics, explaining the central concepts of modern finance in a clear exposition of the arguments for and against different approaches. To better understand markets, he turns to the evidence of financial history, often interrogating the long-term, global dataset that my colleagues and I have compiled. He allows the record of securities markets to enlighten us about events in the past and to underpin informed judgments about the future.

To interpret the current investment environment, Peter Stanyer presents us with a wealth of data. Drawing together theory, evidence and information on the financial environment, he does not flinch from expressing a firm opinion. He presents valuable advice on how to construct a fixed-income portfolio, how to think about liquidity, what quantum of risk is acceptable for different investors, what factors influence investment performance, whether investments of passion are a store of value, and what behavioural biases investors should guard against.

There is something for everyone in this book. It is comprehensive, but never forbidding or opaque. The surveys of each of the main asset classes – equities and risky debt, alternative assets like hedge funds and private equity, and tangible assets like real estate and artworks – are highly informative and the complexities of modern investing are explained with great clarity. This book will help you meet the challenge of investing for your future.

Elroy Dimson
December 2013

Introduction: lessons from the global financial crisis

THE YEARS SINCE THE CREDIT CRISIS of 2007–9 have seen a number of refreshingly simple investment messages gain traction that should enable investors to weather future storms in better shape. These messages are as relevant to individuals managing their own retirement savings as to the managers of the largest investment funds.

One, emphasised by Antti Ilmanen, is that the timing of investment volatility matters as much as its magnitude. Andrew Ang stresses this by asserting that the two most important words in investing are “bad times”. This is a theme running through this edition and it has several aspects. One is that past performance patterns can easily give a falsely reassuring impression of the likelihood of “bad times”. Another is that investors should initiate discussions about how an investment proposal might perform in bad times. If the investment will help mitigate losses of income or capital and give flexibility in bad times, it will be an attractive investment; if it might amplify them, and impose inflexibility, investors will need to be rewarded amply for that and to understand why the reward is expected to be sufficient, given their circumstances. This applies with particular force to the costs imposed by illiquid investments.

Almost all investment products offer an alluring combination of risk and return. When these offer a better prospect than normally offered by the market, investors should always ask, how? Better than market performance must reflect some combination of rare skill; exploiting a market anomaly (but see Chapter 6); or a reward for risk-taking (see Chapter 7). The victims of the Madoff fraud suffered because they or their advisers accepted the description of

past apparent good performance with low volatility of his fraudulent funds as descriptions of how they did, and so would, perform. The victims' suffering was all the worse because their trust was betrayed by Madoff (see Chapter 1).

All investors need to ask for explanations of attractive performance. Low volatility strategies in equities and credit are always popular, and Chapters 7 and 8 encourage investors to suspect that obscure risk-taking may be the explanation. If it is, investors are forewarned that the attractive risk-return trade-off, which is a characteristic of normal times, might provide little protection in "bad times". This was a message of John Campbell and Tuomo Vuolteenaho's (2004) article "Bad Beta, Good Beta" (see Chapter 7). It is also the message that hedge funds and private equity are risk assets, and a usually reliable short cut is to see them as types of equity investing. They will probably not provide much help in "bad times", but might nevertheless provide interesting opportunities (Chapters 9 and 10).

After 2008, some complained that the poor diversification offered by strategies of risk assets could not reasonably have been anticipated. These investors had often been encouraged by the prospect of superior returns to abandon the safety of high-quality government bonds. In the event they provided the security of income and, largely, the diversification of capital values that would be expected of a safe harbour in a time of crisis. As André Perold wrote in 2009: "Risk is a choice rather than a fate."

Among those investors who emerged least scathed from the financial crisis were many whose strategy comprised an allocation to cash or government bonds (whose size was dictated by the investor's risk aversion), offset with an allocation to diversified equities. This approach echoes the portfolio separation theorem of the late James Tobin (see Chapter 5), and many financial advisers (and some institutional investors) served their clients well by adhering to this simple approach. However, the era of ultra-low interest rates in the years after 2008, and the purchase of one-third of the US national debt (and also large quantities of high-quality mortgages) by the Federal Reserve and of one-quarter of the UK's national debt by the Bank of England, forced cautious investors to take more risk and to scale back holdings of increasingly expensive government bonds. The dilemma

of choosing between credit risk and interest-rate risk has hung over income-seeking investors of all types in the years since 2009. This dilemma underlies the debates about whether investors can hope to “time” markets and the role of fixed asset allocation models in Chapters 4 and 5.

Negligible interest rates have had an all-pervading impact. In Chapter 4, survey evidence is reported of substantial holdings of liquidity by high net worth individuals across different wealth bands. The loss of interest income by these wealthy families will have significantly lowered the opportunity cost of indulging in investments of passion. This almost certainly helps to explain the buoyancy of markets ranging from classic cars, stamps and vintage wine to fine art (see Chapter 12). The far-reaching influence on these markets of the Federal Reserve’s response to the global financial crisis was reflected in an article in the *New York Times* in early 2013: “Whether he intended it or not, or even realises it, Ben S. Bernanke has become a patron of the arts.”

I would welcome any feedback and can be contacted at the following email address: peter@peterstanyer.com.

Peter Stanyer
December 2013

PART 1

The big picture

1 Setting the scene

Think about risk before it hits you

Risk is about bad outcomes, and a bad outcome that is expected to arrive at a bad time is especially damaging and requires particularly attractive rewards. Investors and their advisers have typically judged the riskiness of an investment by its volatility, but in the words of Antti Ilmanen, author of *Expected Returns: An Investor's Guide to Harvesting Market Rewards*, not all volatilities are equal, and the timing of bad outcomes matters for risk as much as the scale of those bad outcomes. A theme throughout this book is that investors should think about how investments might perform in bad times as the key to understanding how much risk they are taking. There is little discussion of what constitutes a bad time, which will vary from investor to investor, but it is best captured by Ilmanen, who defines it as a time when an extra dollar of ready cash feels especially valuable.

What constitutes a bad outcome is far from simple. It is determined by each investor (and not by the textbooks). It varies from one investor to another and from investment to investment. If an investor is saving for a pension, or to pay off a mortgage, or to fund a child's education, the bad outcome that matters is the risk of a shortfall from the investment objective. This is different from the risk of a negative return. In Chapter 5, the distinction is drawn between threats to future income (which is of concern to a pensioner) and threats to the value of investments (which matter to a cautious short-term investor). This shows that the short-term risk of losing money is inadequate as a general measure of risk.

Risk is about failing to meet particular objectives. But it is also about the chance of anything happening before then which undermines an investor's confidence in that future objective being met. Since those working in the investment business are uncertain about market relationships, it is reasonable for investors to be at least as uncertain. It is also reasonable for their confidence to be shaken by disappointing developments along the way, even if those developments are not surprising to a quantitative analyst. Investors' expectations are naturally updated as time evolves and as their own experience (and everyone else's) grows. So far as the investor is concerned, the perceived risk of a bad outcome will be increased by disappointments before the target date is reached, undermining confidence in the investment strategy.

The pattern of investment returns along the way matters to investors, not just the final return at some target date in the future. This focus on the risk of suffering unacceptable losses at any stage before an investor's target date has highlighted the dangers of mismeasuring risk. An investor might accept some low probability of a particular bad outcome occurring after, say, three years. However, the likelihood of that poor threshold being breached at some stage before the end of the three years will be much higher than the investor might expect. The danger is that the investor's attention and judgment are initially drawn only to the complete three-year period. As the period is extended, the risk of experiencing particularly poor interim results, at some time, can increase dramatically.

The insights from behavioural finance (see Chapter 2) on investor loss aversion are particularly important here. Disappointing performance disproportionately undermines investor confidence. The risk of this, and its repercussions for the likelihood of achieving longer-term objectives, represents issues that investors need to discuss regularly with their advisers, especially when they are considering moving to a higher-risk strategy.

Research findings from behavioural finance emphasise that investors often attach different importance to achieving different goals. The risk of bad outcomes should be reduced, as far as possible, for objectives that the investor regards as most critical to achieve, and, ideally, any high risk of missing objectives should be focused on the

nice-to-have but dispensable targets. Investors may then be less likely to react adversely to the disappointments that inevitably accompany risk-based strategies. They will know that such targets are less critical objectives.

Risk is about the chance of disappointing outcomes. Risk can be managed but disappointing outcomes cannot, and surprising things sometimes happen. However, measuring the volatility of performance, as a check on what the statistical models say is likely, can be helpful in coming to an independent assessment of risk. But it will always be based on a small sample of data. Thus we can attempt to measure risks we perceive. Risks that exist but that we do not have the imagination or the data to measure will always escape our metrics. There is no solution to this problem of measuring risk, which led Glynn Holton to write in *Financial Analysts Journal* in 2004: "It is meaningless to ask if a risk metric captures risk. Instead, ask if it is useful."

More often than not, the real problem is that unusual risk-taking is rewarded rather than penalised. We need to avoid drawing the wrong conclusions about the good times as well as the bad times. This theme is captured by a photograph at the front of Frank Sortino and Stephen Satchell's book *Managing Downside Risk in Financial Markets*. It shows Karen Sortino on safari in Africa, petting an intimidating rhino. The caption underneath reads: "Just because you got away with it, doesn't mean you didn't take any risk."

The Madoff fraud

If risk is about bad outcomes, to be a victim of fraud is a particularly bad outcome. But when we look after our own savings and investments we are often our own worst enemies. Many people expect savings and investments, in which they have no particular fascination, to be a difficult subject that they do not expect to understand. Any opportunity that presents itself to take a short cut and, in the words of Daniel Kahneman, a Nobel laureate in economics and Eugene Higgins emeritus professor of psychology at Princeton University, to "think fast", which easily leads to avoidable mistakes, rather than "thinking slow", which requires some concentration and effort, will

be tempting. Our lazy inclination to “think fast” (see Chapter 2) is readily exploited by fraudsters who are attracted to our money and our behavioural weaknesses like bees to a honey pot. The enormous Madoff fraud that unravelled in December 2008 provides salutary lessons for us all.

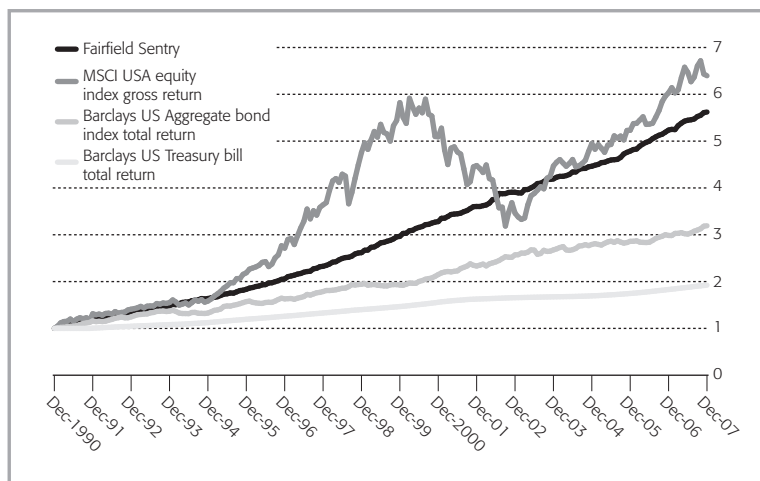
At the end of November 2008, the accounts of the clients of Bernard L. Madoff Investment Securities LLC, an investment adviser registered by the US Securities and Exchange Commission (SEC), had a supposed aggregate value of \$64.8 billion invested in the supposedly sophisticated investment strategy run by Bernie Madoff. His firm had been in operation since the 1960s and it is thought that his fraud started sometime in the 1970s. It lasted until 11th December 2008 when he was arrested and his business was exposed as a huge scam, probably the largest securities fraud the world has ever known.

The amounts that Madoff’s investors thought they owned had been inflated by fictitious investment performance ever since they had first invested, and the amount that Madoff actually controlled was further reduced because early investors, who then withdrew money, were paid their inflated investment values with billions of dollars provided by later investors. The court-appointed liquidator has estimated the actual losses to investors of money they originally invested to be around \$17.5 billion. Nevertheless, at one stage investors believed that they had assets – which, unknown to them, were mostly fictitious – worth \$65 billion invested with Madoff. By September 2013, the liquidators had recovered or entered into agreements to recover, often from early beneficiaries of the fraud, \$9.5 billion or 54% of the estimated losses of amounts invested with the firm, and actual distributions to investors totalled \$5.6 billion. It is likely that the trustee for the liquidation, Irving S. Picard, will succeed in recovering much more than was initially feared of the amounts originally invested. Nevertheless, investors have been left nursing huge losses from what they believed was their wealth. Unless they remain alert, others are in danger of repeating the mistakes that led so many to lose so much. So how can investors protect themselves?

Madoff’s investment strategy seemingly offered the attractive combination of a long-run performance comparable to the

FIG 1.1 If it looks too good to be true, it probably is

Madoff's fictitious cumulative performance compared with market indices,
Dec 1990–Nov 2007, Dec 1990=100



Sources: Barclays, Fairfield Sentry client reports; MSCI

stockmarket but, supposedly thanks to clever use of derivatives, with little volatility.

Marketing material from fund distributors presented the track record of Madoff's fraud in the way shown in Figure 1.1 for Fairfield Sentry, a so-called feeder fund which was entirely invested in Madoff's scam. It showed the seductive combination of apparently low risk and high, but perhaps not outrageous, returns. But an experienced adviser or investor should immediately recognise that the track record shown for Fairfield Sentry looks odd. It is always safe to assume that no investment strategy can deliver such smooth returns well in excess of the guaranteed rate on Treasury bills and that there are no low-risk routes to returns well above the return on cash.

Madoff's strategy was a simple Ponzi scheme, whereby a fraudulent rate of return is promised, seemingly verified in this case by the experience of those early investors who had been able to withdraw inflated amounts. So long as only a few investors demand their money back, they can be paid what they have been told their

investment is now worth. But what they had been told was a lie, and the inflated returns were delivered to a few by redirecting cash from the most recent investors. As with any Ponzi scheme, Madoff relied on robbing Peter to pay Paul.

Ponzi schemes are named after an American fraudster of the 1920s, and they are usually built around a plausible-sounding investment story. However, these scams always collapse as soon as the demands of investors who want to sell their investments outweigh the cash provided by new investors. The Madoff fraud grew so large because it survived many years. Its undoing was the credit squeeze of 2008 when too many investors, who were presumably happy with Madoff's reported investment performance, had to withdraw funds to meet losses elsewhere. This caused the Madoff house of cards to collapse.

The victims were mostly based in the United States, but there were also many from around the world. They included wealthy individuals, charities and a number of wealth managers, but relatively few institutional investors. Many were introduced to Madoff through personal recommendations, which would have stressed his respectable community and business pedigree as a former chairman of the NASDAQ stock exchange and philanthropist.

A large part of the problem is that so many people can be seduced by the belief that they have found a low-risk way of performing surprisingly well. And yet, surprisingly good investment performance always involves risk.

Madoff is not the only instance of large-scale fraud or suspected fraud of the past few years and these episodes provide important lessons for investors and for their advisers. Some of Madoff's investors were following the recommendations of investment advisers, who appeared to take pride in their professional diligence in identifying good managers. The advisers could often point to the name of one of the leading accountancy firms as the auditor of the third-party so-called feeder fund that was the conduit to Madoff Investment Securities, but this provided no protection for investors.

How was someone who had followed the recommendation of an adviser or a friend supposed to identify the risks? Ten old lessons re-emerge:

- 1 The old and seemingly trivial saying that “if it looks too good to be true, it probably is” remains one of the most valuable pieces of investment advice anyone can give.
- 2 Returns in excess of the return offered by the government can be achieved only by taking risk.
- 3 Risk is most obvious when an investment is volatile and is least obvious when a risky investment has not yet shown much volatility. This is rarely mentioned in books on investment.
- 4 Investors should be particularly questioning when an adviser recommends a low volatility investment that offers superior returns.
- 5 Do not invest in something you do not understand simply because a group of your peers is doing so. A desire to conform can explain many decisions that we would otherwise not take.
- 6 Whatever your adviser says, make sure that your investments are well diversified. But keep in mind that diversification is most difficult to assess when risky investments are not obviously volatile.
- 7 Pay particular attention if an adviser gives you inconvenient cautious advice (such as a recommendation to avoid something that you would like to invest in).
- 8 Social status may not be a good indicator of honesty.
- 9 Do not assume that because an investment firm is regulated by the authorities they have been able to check that everything is all right.
- 10 The ability to rely on good due diligence on investment managers is the key to minimising exposure to risk of fraud. An authoritative post-mortem report on the Madoff affair is called “Madoff: a riot of red flags”. Most private investors would not spot these red flags, but it was not by chance that few institutional investors lost money with Madoff. A challenge for private investors is to ensure that they also have access to good-quality manager due diligence.

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