

How to understand markets, risk, rewards and behaviour

Third edition

Peter Stanyer

THE ECONOMIST IN ASSOCIATION WITH PROFILE BOOKS LTD

Published by Profile Books Ltd 3a Exmouth House Pine Street London EC1R OJH www.profilebooks.com

Copyright © The Economist Newspaper Ltd, 2006, 2010, 2014 Text copyright © Peter Stanyer, 2006, 2010, 2014

All rights reserved. Without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored in or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise), without the prior written permission of both the copyright owner and the publisher of this book.

The greatest care has been taken in compiling this book. However, no responsibility can be accepted by the publishers or compilers for the accuracy of the information presented.

Where opinion is expressed it is that of the author and does not necessarily coincide with the editorial views of The Economist Newspaper.

While every effort has been made to contact copyright-holders of material produced or cited in this book, in the case of those it has not been possible to contact successfully, the author and publishers will be glad to make amendments in further editions.

Typeset in EcoType by MacGuru Ltd info@macguru.org.uk

Printed in Great Britain by Clays, Bungay, Suffolk

A CIP catalogue record for this book is available from the British Library

Hardback ISBN: 978 1 78125 071 6 Paperback ISBN: 978 1 78125 072 3 e-book ISBN: 978 1 84765 913 2



The paper this book is printed on is certified by the © 1996 Forest Stewardship Council A.C. (FSC). It is ancient-forest friendly. The printer holds FSC chain of custody SGS-COC-2061

Contents

List of figures	xiv
List of tables	xviii
Acknowledgements	XX
Foreword	xxiii
Introduction	XXV

Part 1 The big picture

1	Setting the scene	3
	Think about risk before it hits you	3
	The Madoff fraud	5
	Betrayal aversion	10
	How much risk can you tolerate?	10
	Attitudes to risk and the financial crisis	13
	Know your niche	13
	War chests and umbrellas	16
	Base currency	16
2	Understand your behaviour	18
	Insights from behavioural finance	18
	Investor biases	20
	Investor preferences	24
	Loss aversion	24
	The "fourfold pattern" of attitudes to gains and losses	25
	Mental accounting and behavioural portfolio theory	27
	Investment strategy and behavioural finance	28

	Parameter uncertainty and behavioural finance	30
	Traditional finance, behavioural finance and evolution	31
3	Market investment returns	33
	Sources of investment performance	34
	Are government bonds risk-free?	35
	Sovereign risk and "a country called Europe"	37
	Safe havens that provide different kinds of shelter	38
	Which government bonds will perform best?	40
	Is the break-even inflation rate the market's forecast?	43
	What premium return should bond investors expect?	48
	The place of safe-harbour government bonds in strategy	48
	The equity risk premium	49
	Equity risk: don't bank on time diversifying risk	59
4	How should and how do investor strategies evolve?	64
	Model investment strategies	64
	Risk-taking and portfolio rebalancing	66
	The evolution of wealth and its investment since 2002	73
	What is a sovereign wealth fund?	75
	Liquid alternative investments	79
5	The time horizon and the shape of strategy:	
	keep it simple	81
	An appropriate role for strategy models	81
	Asset allocation models: an essential discipline	82
	Short-term investment strategies	83
	How safe is cash?	84
	No all-seasons short-term strategy	84
	Do bonds provide insurance for short-term investors?	85
	Are you in it for the long term?	88
	Time horizon for private and institutional wealth	88
	Long-term investors	90
	Financial planning and the time horizon	91
	"Safe havens", benchmarking, risk-taking and long-term	
	strategies	92
	The danger of keeping things too simple	92

Declines in prices are sometimes good for you	93
Unexpected inflation: yet again the party pooper	95
"Keep-it-simple" long-term asset allocation models	95
Should long-term investors hold more equities?	97
Inflation, again	98
Laddered government bonds: a useful safety-first	
portfolio	99
Bond ladders, tax and creditworthiness: the case of US	
municipal bonds	101
Municipal bond ladders: the impact of the credit crisis	
and ultra-low interest rates	106
What's the catch in following a long-term strategy?	107
Market timing: an unavoidable risk	108
Some "keep-it-simple" concluding messages	110
The chance of a bad outcome may be higher than you think	110
"Models behaving badly"	115

Part 2 Implementing more complicated strategies

6	Setting the scene	121
	A health warning: liquidity risk	121
	Investing in illiquid markets	121
	"Liquidity budgets"	122
	Illiquidity in normally liquid markets	123
	Behavioural finance, market efficiency and arbitrage	
	opportunities	125
	Barriers to arbitrage	126
	Fundamental risk and arbitrage	126
	Herd behaviour and arbitrage	127
	Implementation costs, market evolution and arbitrage	130
	Institutional wealth and private wealth: taxation	131
7	Equities	135
	The restless shape of the equity market	135
	Concentrated stock positions in private portfolios	135

Stockmarket anomalies and the fundamental insight of th	е
capital asset pricing model	137
"Small cap" and "large cap"	140
Will it cost me to invest ethically or sustainably?	143
Don't get carried away by your "style"	145
Value and growth managers	147
Should cautious investors overweight value stocks?	148
Fashionable investment ideas: low volatility equity strates	ies 151
Equity dividends and cautious investors	151
Home bias: how much international?	152
Who should hedge international equities?	159
How much in emerging markets?	162
Fashionable investment ideas: frontier markets	167
8 Credit	169
Credit quality and the role of credit-rating agencies	109
Portfolio diversification and credit risk	179
Local currency emerging-market debt	1/9
Securitisation, modern ways to invest in bond markets an	
the credit crunch	183
Mortgage-backed securities	184
The role of mortgage-backed securities in meeting	104
investment objectives	186
International bonds and currency hedging	189
What does it achieve?	190
What does it cost?	192
How easy is foreign exchange forecasting?	194
	-/-
9 Hedge funds	195
What are hedge funds?	197
Alternative sources of systematic return and risk	198
"Do hedge funds hedge?"	199
The quality of hedge fund performance data	201
What motivates hedge fund managers?	202
Are hedge fund fees too high?	203
The importance of skill in hedge fund returns	204

· · · · · · · · · · · · · · · · · · ·	205
	207
6	209
Global macro	209
Equity hedge, equity long/short and equity market	
neutral	209
Short-selling or short-biased managers	211
Long-only equity hedge funds	211
Emerging-market hedge funds	212
Fixed-income hedge funds: distressed debt	213
Arbitrage strategies	214
Fixed-income arbitrage	214
Merger arbitrage	215
Convertible arbitrage	216
Statistical arbitrage	216
Multi-strategy funds	217
Commodity trading advisers (or managed futures funds)	218
Hedge fund risk	220
Madoff, hedge fund due diligence and regulation	220
Operational risks	220
Illiquid hedge fund investments and long notice periods	221
Lies, damn lies and some hedge fund risk statistics	222
"Perfect storms" and hedge fund risk	224
Managing investor risk: the role of funds of hedge funds	225
How much should you allocate to hedge funds?	226
Questions to ask	228
Your hedge fund manager	228
Your hedge fund adviser	233
Your fund of hedge funds manager	233
Private equity: information-based investment returns	234
What is private equity?	235
Private equity market risk	236
Listed private equity	240
Private equity portfolios	243
Private equity returns	243
	neutral Short-selling or short-biased managers Long-only equity hedge funds Emerging-market hedge funds Fixed-income hedge funds: distressed debt Arbitrage strategies Fixed-income arbitrage Merger arbitrage Convertible arbitrage Statistical arbitrage Multi-strategy funds Commodity trading advisers (or managed futures funds) Hedge fund risk Madoff, hedge fund due diligence and regulation Operational risks Illiquid hedge fund investments and long notice periods Lies, damn lies and some hedge fund risk statistics "Perfect storms" and hedge fund risk How much should you allocate to hedge funds? Questions to ask Your hedge fund manager Your hedge fund adviser Your fund of hedge funds manager

	Private investments, successful transactions and biases	
	in appraisal valuations	246
11	Real estate	248
	What is real estate investing?	249
	What are the attractions of investing in real estate?	251
	Diversification	251
	Modern real estate indices and assessing the diversifying	
	role of real estate	251
	Income yield	258
	Inflation hedge	259
	Styles of real estate investing and opportunities for active	
	management	259
	What is a property worth and how much return should	
	you expect?	260
	Rental income	260
	Government bond yields as the benchmark for real	
	estate investing	263
	Tenant credit risk	263
	Property obsolescence	264
	Private and public markets for real estate	264
	International diversification of real estate investment	266
	Currency risk and international real estate investing	266
12	Art and investments of passion	268
	How monetary easing probably inflated the prices	
	of fine art and collectibles	269
	Psychic returns from art and collectibles	270
	Wealth, inequality and the price of art	273
	Art market indices	278
	Price indices for other investments of passion or	
	"collectibles"	280
	Investing in art and collectibles	284
	Shared characteristics of fine art and other investments of	
	passion	287

Appendices

1 Glossary	289
2 Essential management information for investors	304
3 Trusting and aligning with your adviser	311
4 Sources and recommended reading	315
Notes on sources	331
Index	334

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

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

5

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

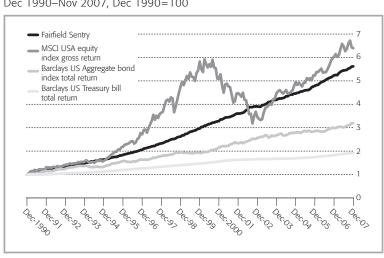


FIG 1.1 If it looks too good to be true, it probably is

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:

9

- **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.

Betrayal aversion

The Madoff fraud puts a spotlight on the relationship between advisers and clients. Investors are at their most vulnerable in their dealings with advisers, and yet establishing a bond of trust with one or more advisers is probably the most important ingredient for the successful management of wealth. Iris Bohnet and Richard Zeckhauser, respectively professor of public policy and Ramsey professor of political economy at Harvard University's Kennedy School of Government, have found that individuals systematically require a premium return to compensate for the risk that they might be betrayed by an agent who is supposed to be working for them. This premium is greater than the premium that would be asked to accept the same probability of a poor outcome where there is no likelihood of betrayal. As Bohnet has written:

People care not only about outcomes, but about how outcomes came to be ... that doesn't strike anyone but an economist – like me – as a surprise.

This highlights the importance of trust in the adviser–client relationship, and the psychological gains that flow where it is present and the psychological and possibly financial damage that results when it is not.

How much risk can you tolerate?

The assessment of investor risk tolerance is a fundamental step in designing any investment strategy, but advisers and academics approach it in different ways. Academic economists use mathematical assumptions to model risk aversion. These assumptions are attractive to them in part because they can be used in models (and also because they can be tested empirically). Meanwhile, behavioural finance stresses the importance of loss aversion rather than risk aversion, and the asymmetry of response between gains and losses which is revealed in behaviourist studies (see Chapter 2).

Wealth managers have for a long time used questionnaires to categorise their clients by their attitudes to risk-taking. These questionnaires typically cover investors' circumstances (age, family,

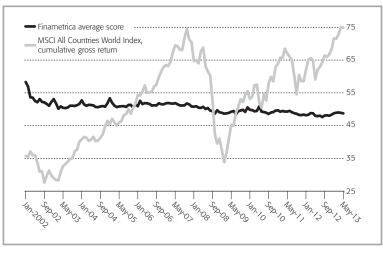


FIG 1.2 Risk tolerance scores and equity market returns Jan 2002–May 2013

Sources: Finametrica Pty Ltd; MSCI

income, wealth, expenditure plans, and so on) as well as their attitude to risk. One problem is that questions posed by wealth managers about risk may use language and concepts that are unfamiliar to non-experts. Anecdotal evidence suggests that people who are not familiar with investments often expect a risk questionnaire to be difficult to complete. They may therefore ask their advisers to help them answer the questions. This introduces errors and also seems to introduce systematic bias, as investment advisers appear to be more tolerant of risk than their clients. For these reasons, conventional risk questionnaires may fail standard criteria for assessing people's attitudes.

In recent years psychometric profiling services have developed to address these concerns, making use of focus groups to make sure that their questions are easily understood. For example, Finametrica, an Australian consultancy, has built up a database of over 520,000 responses from around the world to its questionnaire, which itself grew out of research by psychology academics in the United States. These responses reveal some interesting patterns. For example,

Finametrica reports that the pattern of responses does not vary much by country; individuals' tolerance for risk is, on average, fairly stable over time; women tend to be more cautious than men (which is important for investing family wealth); and investment professionals tend to be more tolerant of risk than their clients (who in turn tend to be marginally more tolerant of risk than the population as a whole). The database also shows quite a wide variation of responses for individuals around these average characteristics.

The finding (which is repeatedly found) that investment advisers are on average more tolerant of risk than their clients may help to explain instances of investors saying to their advisers: "I didn't realise we were taking that much risk." This greater tolerance of risk might be interpreted as reflecting advisers' greater understanding of investment risk than that of their clients. Separate survey findings (also from Australia) suggest that investor education (for example, through attendance at seminars) has little impact on the risk tolerance of investors, even though it can be effective in persuading employees to save more for retirement. This suggests that investment advisers may think it reasonable to take more risk than most people would wish, not because they have a better understanding of investment risk, but because their nature is to enjoy the proximity to volatile markets. It seems that cautious people probably cannot be educated out of their disposition to be cautious, and it also seems likely that well-designed psychometric testing may help to categorise the risk appetite of investors better than ad hoc questionnaires.

However, a single score on a risk-tolerance questionnaire, even a well-designed one, will not be an adequate guide to an investor's willingness or capacity to take risk. An investor is likely to have different financial accounts for different purposes: one or more may be critical to achieve and another purely aspirational; one may be for a short-term objective and another for a long-term one (such as pension saving). A well-designed risk score might provide a starting point for discussing risk-taking, but it will not give the differentiated answers that are probably needed, nor will it cope with the different ways that investors respond to the experience or threat of losses, sometimes by increasing risk-taking (see Chapter 2).