

Behavioural Finance for Private Banking

**Thorsten Hens
and
Kremena Bachmann**



A John Wiley and Sons, Ltd, Publication

Behavioural Finance for Private Banking

For other titles in the Wiley Finance series
please see www.wiley.com/finance

Behavioural Finance for Private Banking

**Thorsten Hens
and
Kremena Bachmann**



A John Wiley and Sons, Ltd, Publication

Copyright © 2008 John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester,
West Sussex PO19 8SQ, England
Telephone (+44) 1243 779777

Email (for orders and customer service enquiries): cs-books@wiley.co.uk
Visit our Home Page on www.wiley.com

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except under the terms of the Copyright, Designs and Patents Act 1988 or under the terms of a licence issued by the Copyright Licensing Agency Ltd, 90 Tottenham Court Road, London W1T 4LP, UK, without the permission in writing of the Publisher. Requests to the Publisher should be addressed to the Permissions Department, John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England, or emailed to permreq@wiley.co.uk, or faxed to (+44) 1243 770620.

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The Publisher is not associated with any product or vendor mentioned in this book.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold on the understanding that the Publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

Other Wiley Editorial Offices

John Wiley & Sons Inc., 111 River Street, Hoboken, NJ 07030, USA

Jossey-Bass, 989 Market Street, San Francisco, CA 94103-1741, USA

Wiley-VCH Verlag GmbH, Boschstr. 12, D-69469 Weinheim, Germany

John Wiley & Sons Australia Ltd, 42 McDougall Street, Milton, Queensland 4064, Australia

John Wiley & Sons (Asia) Pte Ltd, 2 Clementi Loop #02-01, Jin Xing Distripark, Singapore 129809

John Wiley & Sons Canada Ltd, 6045 Freemont Blvd. Mississauga, Ontario, L5R 4J3, Canada

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Library of Congress Cataloging-in-Publication Data

Hens, Thorsten.

Behavioural finance for private banking / Thorsten Hens, Kremena Bachmann.

p. cm. — (The Wiley finance series)

Includes bibliographical references and index.

ISBN 978-0-470-77999-6 (cloth)

1. Private banks. 2. Investments—Psychological aspects. 3. Finance—Psychological aspects. 4. Banks and banking—Customer services. 5. Wealth—Management. I. Bachmann, Kremena. II. Title. III. Title: Behavioral finance for private banking.

HG1978.H46 2008

332.1'230688—dc22

2008038617

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

ISBN 978-0-470-77999-6

Typeset in 10/12pt Times by Integra Software Services Pvt. Ltd, Pondicherry, India

Printed and bound in Great Britain by Antony Rowe

To Britta, Jerome and Annabelle,
as well as to Christoph and Vivien.

Contents

List of Figures	ix
List of Tables	xiii
Notation	xv
Preface	xxi
1 Introduction	1
1.1 The private banking business	1
1.2 Current challenges in private banking	3
1.3 Improving service quality with behavioural finance	6
1.4 Conclusion	9
2 Decision Theory	11
2.1 Introduction	12
2.2 Mean-variance analysis	14
2.3 Expected utility theory	22
2.4 Prospect theory	35
2.5 Prospect theory and the optimal asset allocation	50
2.6 A critical view on mean-variance theory	59
2.7 A critical view on expected utility axioms	63
2.8 Comparison of expected utility, prospect theory, and mean-variance analysis	64
2.9 Conclusion	65
3 Behavioural Biases	67
3.1 Information selection biases	68
3.2 Information processing biases	70
3.3 Decision biases	82
3.4 Decision evaluation biases	87
3.5 Biases in intertemporal decisions	88
3.6 Behavioural biases and speculative bubbles	91
3.7 Cultural differences in the behavioural biases	95

4	Risk Profiling	105
4.1	Dealing with behavioural biases	105
4.2	The risk profiler and its benefits	106
4.3	Designing a risk profiler: Some general considerations	108
4.4	Implemented risk profilers: Case study of the former Bank Leu	109
4.5	A risk profiler based on the mean-variance analysis	114
4.6	Integrating behavioural finance in the risk profiler	117
4.7	Case study: Comparing risk profiles	127
4.8	Conclusion	134
5	Product Design	135
5.1	Case study: “Ladder Pop”	136
5.2	Case study: “DAX Sparbuch”	143
5.3	Optimal product design	149
5.4	Conclusion	155
6	Dynamic Asset Allocation	157
6.1	The optimal tactical asset allocation	158
6.2	The optimal strategic asset allocation	171
6.3	Conclusion	184
7	Life Cycle Planning	187
7.1	Case study: Widow Kassel	187
7.2	Main decisions over time	189
7.3	Consumption smoothing	189
7.4	The life cycle hypothesis	190
7.5	The behavioural life cycle hypothesis	192
7.6	The life cycle asset allocation problem	194
7.7	The life cycle asset allocation of an expected utility maximizer	195
7.8	The life cycle asset allocation of a behavioural investor	198
7.9	Life cycle funds	202
7.10	Conclusion	206
8	Structured Wealth Management Process	207
8.1	The benefits of a structured wealth management process	209
8.2	Problems implementing a structured wealth management process	210
8.3	Impact of the new process on conflicts of interests	210
8.4	Learning by “cycling” through the process	211
8.5	Case study: Credit Suisse	211
8.6	Mental accounting in the wealth management process	217
8.7	Conclusions	226
9	Conclusion and Outlook	229
9.1	Recapitulation of the main achievements	229
9.2	Outlook of further developments	229
	References	231
	Index	237

List of Figures

1.1	Efficiency and profitability of local and foreign banks in Switzerland	2
1.2	ROE weighted by the capitalization level of different countries	3
1.3	Differentiation drivers	5
1.4	Segmentation criteria	6
2.1	The lottery given by the returns of a fund of hedge funds	13
2.2	Mean-variance representation of the risk premium	16
2.3	The efficient frontier	16
2.4	Risk aversion and risk premium	17
2.5	Selecting the optimal portfolio	17
2.6	Two-fund-separation	19
2.7	Illustration of the certainty equivalent, risk premium, and risk aversion	29
2.8	Jensen's inequality	30
2.9	The value function	39
2.10	The probability weighting function	42
2.11	Return of hedge funds as they are and as seen by a prospect theory investor	45
2.12	Return probabilities	46
2.13	Risk taking conditions	49
2.14	Mean-variance preferences, based on the piecewise power value function of Kahneman and Tversky	51
2.15	Mean-standard deviation diagram with PT-indifference curves based on the piecewise exponential value function	51
2.16	Reward-risk perspective on the prospect theory	55
2.17	Cumulative gross returns (1993–2006)	56
2.18	Asset returns in a mean-variance diagram	56
2.19	Asset returns in an average-gain-loss diagram	57
2.20	Mean-variance tangential portfolio	57
2.21	Optimal asset allocation of a behavioural investor with $\beta = 2$	58
2.22	Optimal asset allocation of a behavioural investor with $\beta = 5$	58
2.23	Optimal asset allocation of a behavioural investor with $\beta = 10$	58
2.24	Two quite different structured products with the same mean and variance	59
2.25	The mean-variance paradox	60
2.26	The tangent portfolio without SPI+	61
2.27	The tangent portfolio with SPI+	61
2.28	Optimal asset allocation of a behavioural investor without SPI+	61

2.29	Optimal asset allocation of a behavioural investor with SPI+	62
2.30	The Ellsberg paradox	64
2.31	Similarities and differences of expected utility, prospect theory, and mean-variance	65
3.1	A typical decision-making process	68
3.2	Illustration of conditional probability	71
3.3	Experimental results on the gambler's fallacy	73
3.4	Performance of LGT-GST fund and its benchmark	74
3.5	Ideal growth stock purchase according to Fuller and Thaler Asset Management	77
3.6	The overconfidence effect in the case of forecasting	79
3.7	Hazardous trading	80
3.8	Average return per information level	80
3.9	Exploiting the favourite long-shot bias	82
3.10	Portfolio pyramid	83
3.11	Disposition effect	84
3.12	Equity portfolio weights of U.S., Japanese and British investors (Based on French and Poterba (1991))	85
3.13	Investor's payoff over time	91
3.14	Cultural differences according to Hofstede's "Uncertainty Avoidance Index"	95
3.15	Value functions of students in different countries based on the results of Bontempo <i>et al.</i> (1997)	96
3.16	Value functions of students in different countries based on the results of Weber and Hsee (1998)	97
3.17	Inflation rate versus degree of patience in several countries	99
3.18	Income per capita versus degree of patience in several countries	99
3.19	Individualism versus loss aversion index (theta)	100
3.20	Trend chasing and individualism around the world	101
3.21	Ambiguity aversion and the equity premium	104
4.1	Different advice from various banks according to <i>Stocks</i> magazine 41–42, 2003	107
4.2	An experimental laboratory at the University of Zurich	109
4.3	Risk ability in the mean-variance analysis	116
4.4	Mean-variance analysis with risk ability	116
4.5	Heterogeneity in the individuals' risk and loss aversion assessed in a study at ZKB	118
4.6	Heterogeneity in the individuals' risk aversion over gains α^+ and losses α^-	118
4.7	Heterogeneity in the individuals' perception of probabilities	119
4.8	Time diversification: The longer the investment horizon, the better the return-risk ratio	123
4.9	Probability for bonds beating stocks for portfolios with different time horizons	124
4.10	Optimal asset allocation over different time horizons	124
4.11	Investment advice of the former Bank Leu	130
4.12	Optimal asset allocation of Christine Kuhn according to BhFS	133
4.13	Client's classification based on predefined risk profiles	133

5.1	Optimal payoff from the perspective of behavioural investors	136
5.2	Payoff of the Ladder Pop at maturity	138
5.3	SMI and Ladder Pop prices (indexed) from 15.01.2002 to 12.12.2006	138
5.4	Two ways of achieving 8.1 % return after two years: Investing at 4 % each year or changing to 10 % after the first year	139
5.5	Scenarios setup	140
5.6	Payoff DAX Sparbuch per month	145
5.7	Payoff of a barrier-like structured product	149
5.8	Optimal structured-product of a CRRA investor with $\alpha = 0.8$	151
5.9	Optimal structured product for a mean-variance investor	152
5.10	Optimal structured product for a behavioural investor with $\beta = 2$	152
5.11	Optimal structured product for a behavioural investor with $\beta = 1$	153
5.12	Optimal structured product of an investor with biased perception of probabilities	153
5.13	Interactive multi-touch table	154
6.1	Example of Markov matrices	158
6.2	The CRRA investor on a random walk	162
6.3	TAA of the CRRA investor on mean reversion after “good” times	164
6.4	TAA of the CRRA investor on mean reversion after “bad” times	164
6.5	TAA of the behavioural investor on a random walk	167
6.6	TAA of the behavioural investor on mean reversion after “good” times	168
6.7	TAA of the behavioural investor on mean reversion after “bad” times	169
6.8	Sample paths of a random walk without drift	172
6.9	Variance of random walks over time	172
6.10	An example of mean-variance ratios of a random walk over different time horizons	173
6.11	Mean-variance ratio of S&P 500 annual logarithmic returns (1871–2007)	173
6.12	Variance ratios for S&P 500 annual logarithmic returns (1871–2007)	174
6.13	Asset allocation of the CRRA investor on a random walk	176
6.14	Asset allocation of the CRRA investor on mean reversion after “bad” times	177
6.15	Asset allocation of the CRRA investor on mean reversion after “good” times	178
6.16	Asset allocation of the CRRA investor on mean reversion after “good” times (fix-mix)	179
6.17	Asset allocation of the CRRA investor on mean reversion after “bad” times (fix-mix)	180
6.18	Asset allocation of the behavioural investor under a random walk	181
6.19	The behavioural investor on mean reversion after “good” times	182
6.20	The behavioural investor on mean reversion after “bad” times	183
7.1	Performance of German stocks (DAX) versus German government bonds (REX index)	188
7.2	Cumulative dividends from DAX versus interest earnings from REX	188
7.3	Consumption smoothing	190
7.4	Utility derived from consumption drawn from different mental accounts	192
7.5	Separating risk preference from risk ability	194
7.6	Perfect consumption smoothing	196
7.7	The impact of the discount factor on current consumption	196

7.8	The impact of asymmetric returns on consumption and asset allocation of a CRRA investor	198
7.9	Impact of human capital on consumption and asset allocation of a CRRA investor	199
7.10	Impact of required consumption on the optimal asset allocation of a CRRA investor	200
7.11	The behavioural investor and consumption smoothing	201
7.12	The habit formation effect on the optimal consumption over time	201
7.13	The effect of hyperbolic discounting on consumption	202
7.14	The effect of asymmetric returns	203
7.15	The effect of asymmetric returns with a less attractive risky asset	204
7.16	The cumulative effect of human capital, hyperbolic and intertemporal discounting, and habit formation	205
8.1	Exploiting the comparative advantage of the relationship manager (RM); vis-à-vis the investment committee (IC)	210
8.2	The wealth management process of Credit Suisse	211
8.3	Example of a personal balance sheet	213
8.4	Assets split	213
8.5	The asset split protects the client from a collapse of diversification	214
8.6	Finding an optimal investment strategy for the client	215
8.7	Integrated goal-based wealth management approach	226

List of Tables

1.1	Total wealth of high net worth individuals worldwide	4
1.2	Wealth management versus brokerage	4
2.1	Historical equity premiums of different countries	15
2.2	The asset allocation puzzle	19
2.3	An example of prospect theory violating Axiom 0	43
2.4	Risk taking behaviour in the face of gains and losses with small and moderate probabilities	50
2.5	Mean-variance violating the independence axiom	62
2.6	Advantages and disadvantages of the three theories of choice	64
3.1	Descriptive statistics of the 1-year annual real returns of the value weighted CRSP all-share market portfolio, the intermediate government bond index of Ibbotson, one month T-Bill as risk-free rate, and the size and value docile portfolios from 1927 to 2007 (81 yearly observations)	69
3.2	The splitting bias	78
3.3	Famous bubbles (Shleifer, 2000) continued by ourselves	92
3.4	Fitting prospect theory parameters of the results of Weber and Hsee (1998) and Bontempo <i>et al.</i> (1997)	97
3.5	Volatility and market returns in different countries	102
3.6	Value and glamour stocks performance from 1975 to 1995	103
4.1	Fighting against biases leading to irrational decisions	105
4.2	Summary investment advice of BhFS and the former Bank Leu	133
5.1	Final wealth with the underlying, the Ladder Pop, and a bond	141
5.2	Expected utility and certainty equivalents of a CRRA investor	142
5.3	Product returns	142
5.4	Prospect utility and certainty equivalents of a behavioural investor	142
5.5	DAX return per month and DAX bonus for that month (Nov. 2006–Dec. 2007)	144
5.6	DAX return and DAX bonus per month (Nov. 2006–Dec. 2007)	144
5.7	DAX return and DAX Sparbuch return on annual basis	145
5.8	Final wealth of a CRRA investor	147
5.9	Expected utilities and certainty equivalents of CRRA investors	147
5.10	Minimum appreciation of the underlying required by CRRA investors	147
5.11	Prospect utility of behavioural investors with an absolute reference point	148

5.12	Prospect utility of behavioural investors with a relative reference point	148
5.13	Minimum appreciation of the underlying required by behavioural investors with an absolute reference point	148
5.14	Structured products chosen by participants of a field study where structured products could be designed freely with a special editor	155
6.1	The tactical asset allocations of CRRA and behavioural investors under a random walk and a mean reversion	170
6.2	Strategic asset allocations of CRRA and behavioural investors under a random walk and mean reversion	184
6.3	Optimal asset allocations of myopic investors under a random walk and mean reversion	184
8.1	Asset payoffs	218
8.2	Prospect utilities and certainty equivalents with different mental accounting rules	219
8.3	Asset returns	224

Notation

The following symbols are used in this book.

$ARA(.)$ absolute risk aversion

α^+, λ^+ risk aversion over gains

α^-, λ^- risk aversion over losses

α^i risk aversion parameter of investor i

b^g budget for goal g

β loss aversion

$c = 1, \dots, C$ consequences

$CARA(.)$ constant absolute risk aversion

CE, X certainty equivalent

$const$ a constant

$cov_{k,j}$ covariance of the returns of asset $k = 1, \dots, K$ and $j = 1, \dots, J$

$CRRRA(.)$ constant relative risk aversion

d return

$DARA(.)$ decreasing absolute risk aversion

$DRRA(.)$ decreasing relative risk aversion

δ exponential discount factor

δ^g relative importance of goal g

δ^g weight of goal g

Δx change in the realisations of a random variable x

e return

E_U expected utility

$F(c)$ cumulative distribution function F at some point c

$g = 1, \dots, G$ investment goals

γ^+ probability weighting factor over gains

γ^- probability weighting factor over losses

h habit formation factor

$i = 1, \dots, I$ investors

$IARA(.)$ increasing absolute risk aversion

i.i.d. independent and identically distributed

$IRRA(\cdot)$ increasing relative risk aversion

$j = 1, \dots, J$ mental accounts

$k = 0, 1, \dots, K$ (risky) assets

K^j subset of assets in mental account j

λ asset allocation

λ_0 portfolio weight of the risk-free asset

λ_k portfolio weight of asset k

λ^{opt} optimal asset allocation

λ_k^T assets weights in the tangent portfolio T

λ_k^g asset weight for asset k serving the goal g

L lottery

m return

μ expected value of a random variable

μ_λ expected return of a portfolio λ

p_i probability for consequence c_i

p_s probability for state s

P^n probability for a sequence of outcomes of order n

$p(\cdot|\cdot)$ conditional probability

$p(\cdot \cap \cdot)$ joint probability of events

PT_v expected prospect value

pt^+ average gain utility

pt^- average loss utility

R, r return

R_f risk-free return

R_s^k return of asset $k = 1, \dots, K$ in state $s = 1, \dots, S$

R_s^M return of the market portfolio M in state $s = 1, \dots, S$

$RRA(\cdot)$ relative risk aversion

RP reference point

$s = 1, \dots, S$ or $s = u, d$ states of nature

σ^2 variance of asset returns

σ_λ^2 variance of portfolio return λ

$t = 0, \dots, T$ time period

$u(\cdot)$ utility function; $u^i(\cdot)$ utility of investor i

U^g utility from achieving goal g

$u'(\cdot)$ first derivative of a function

$u''(\cdot)$ second derivative of a function

u return

V mean-variance utility function

$v(\cdot)$ value function; $v^i(\cdot)$ value function of investor i

$w(p)$ probability weighting function
 $w^*(p)$ normalized probability weighting function
 $w(K^j)$ weight of mental account K^j
 \underline{w} minimum wealth or a ‘safety first’ constraint
 w_s^g wealth in state s associated with the goal g
 \tilde{w}_s^g state-dependent exogenous wealth
 w_t wealth in period t



«Wir können sie jetzt nicht stören. – Sie sind mitten in der neuen Anlagestrategie!»

We can't bother them now – they are working on a new investment strategy!

Source: Felix Schaad in *Tages-Anzeiger*, 28.05.2004

Preface

Behavioural finance is an interdisciplinary research area that combines psychology and finance. It originated from decision theory – most notably the psychological traps that occur in making decisions under uncertainty. Private banking consists of a collection of services that banks offer on a more personal basis to wealthy investors. In particular, these services include investment advice given by relationship managers helping clients to achieve their financial goals without falling into psychological traps when investing their wealth on financial markets. Hence, behavioural finance is an appropriate framework to give private banking a scientific foundation.

The high wealth of private banking clients makes it possible to give tailor-made advice that best suits the risk ability, risk preference, and risk awareness of the client. Within the bank, the relationship manager has a key role in providing this important service to clients. He needs to have a good knowledge of both the financial markets and the individual client. While traditional finance with its cornerstones of mean-variance analysis, efficient market hypothesis, and derivative pricing has provided good models to understand the market, it is not appropriate for understanding clients. On the one hand, traditional finance has ignored behavioural biases so that the relationship manager is unable to understand many of the reactions his clients show in the course of making investments. On the other hand, traditional finance has focused on a simplified notion of risk – the variance – that is neither appropriate for most private investors nor leads to rational decisions when applied to modern assets like hedge funds or structured products. Hence, in order to provide the best service quality to their clients, most relationship managers need some knowledge of behavioural finance. Without this knowledge, relationship managers who are trained only in traditional finance would be left unprepared for their task to optimally position their clients on the trade-offs financial markets provide.

The purpose of this book is to close this gap by providing advisors of private clients with both the appropriate framework for their task as well as a collection of practical tools to support their work.¹ To achieve this goal we structure the book as follows.

After a brief introduction into the current challenges of the private banking industry, we go extensively into the foundations of behavioural finance: decision theory. Decision theory has three broad paradigms: expected utility theory, prospect theory, and mean-variance analysis. Expected utility theory clarifies which decisions are rational, prospect theory describes which decisions are most often observed, and mean-variance analysis is the best known decision model in practice. As we will show, in special cases like normally distributed returns, the three decision models coincide, but in general they are mutually distinct. In particular, it is possible that prospect theory decisions are rational while mean-variance decisions are irrational; i.e., the naïve classification “behavioural is equal to irrational” and “mean-variance is equal to rational” can be totally wrong.

¹ Please visit our webpage www.bfpb.ch to download the Excel tools created for this book.

Chapter 3 goes through the many psychological traps (behavioural biases) that are commonly observed along a typical decision-making process. In particular, we show how these biases differ across different cultures, which is of vital importance to any bank offering private banking services worldwide. Chapter 4 then shows how to integrate the insights achieved thus far into an important tool of highly practical relevance: a risk profiler. A risk profiler is a well-designed questionnaire that assesses the client's risk ability, risk preferences, and his risk awareness. Besides choosing the most appropriate questions, behavioural finance helps to evaluate the answers in a consistent way. In many countries, risk profilers are required by law. We see this regulatory requirement as a chance for any bank to improve the quality of its advisory process.

In Chapter 5 we analyze the colourful world of structured products, a business of increasing importance to many banks. We show how to evaluate structured products both from an expected utility theory perspective and from a prospect theory point of view. Moreover, we explain how to design structured, tailor-made products for private clients. After this, in Chapter 6, we go into the dynamics of investing. We show which investor will rebalance his portfolio during the course of investments and which one will take his profits or increase risks. Moreover, we give a foundation for common investment advice like the age rule, according to which the share of risky assets ought to increase with the investment horizon. In the following chapter we look at the life cycle investment problem. Besides the time horizon effect, the flow of exogenous income and the consumption needs influence the asset allocation over the life cycle. In particular, we study behavioural effects such as habit formation and hyperbolic discounting and how they influence clients' investing decisions.

The final chapter, Chapter 8, wraps up the main contents of the book in the form of the practical problem of wealth management. We show how a typical advisory process should be structured to make the best use of the services the bank can offer. Such a process needs to integrate personal asset-liability management, life cycle aspects, a risk profiler, a strategy implementation, and a well-suited documentation. In particular, we highlight the relevance of framing effects in documentation and the importance of mental accounting in advising clients how to invest their wealth optimally.

The style of the book is mixed. Besides intuitive written explanations, examples, and case studies, we also deepen the understanding by using some mathematics. Case studies and mathematics are highlighted in boxes. One can also understand the book on a more general level without going into these boxes. We hope that, in this way, this book is appropriate for a broader audience. Certainly the book is suitable for master classes both at business schools and universities in the primary studies, but it is also suitable for executive master programmes.² Independent of organized courses, our book can be used as self-study material to obtain a Behavioural Finance Upgrade for anyone trained in traditional finance.

Even though by now there are quite a few good books on behavioural finance – such as the two brilliant books by Hersh Shefrin, and also the two excellent books by James Montier in this series – our book is unique since it focuses more on client advisory than on asset pricing. This focus makes use of our comparative advantage of being in one of the world's first-class centres for private banking. Indeed, our book benefitted a lot from projects we have done for the former Bank Leu, Credit Suisse (CS), Union Bank of Switzerland (UBS), and Zürcher Kantonalbank (ZKB), to name just a few.

² Indeed, the content has been taught for many years at the Norwegian Business School (NHH) in Bergen, at the University of Zurich (UZH), and also at executive programmes of the Swiss Training Centre for Investment Professionals (AZEK), the Swiss Banking School (SBS), and now the Swiss Finance Institute (SFI).

Naturally, our book has some overlaps with other books on behavioural finance but the core ideas are based on our own research done in NCCR-Finrisk and the Research Priority Program Finance (RPPF) at the University of Zurich. We are indebted to our collaborators in these projects: foremost, Enrico De Giorgi, Marc Oliver Rieger, János Mayer, and Mei Wang. Moreover, we would like to thank the above-mentioned research networks, in particular their directors, Rajna Gibson and Marc Chesney, for intellectual as well as financial support. The generous support from NCCR-Finrisk was not obvious, given the focus of that network, which is more on traditional finance. We are grateful to the International Scientific Council of NCCR-Finrisk and to the Director of NCCR-Finrisk, Rajna Gibson, for their tolerance. Last but not least, we would like to express our gratitude to many people who provided advice and comments during the development of this book. Without the help of the editors of Wiley Finance, most notably Peter Baker and Aimée Dibbens, we would not have finalized this book. Moreover, the book benefitted greatly from comments from Peter Wüthrich, Doris Schönemann, Mila Winter, Christoph Bachmann, Nilüfer Caliskan, Martine Baumgartner, Martin Vlcek, Andreas Kamm, Philippe Martin, Richard Meier, Alfons Cortes, Thierry Bonnass and Amelie Brune. Finally, without the feedback from many students at the Norwegian business school (NHH), University of Zurich (UZH), Swiss Training Centre for Investment Professionals (AZEK), and Swiss Finance Institute (SFI), the book would not have reached its current level of pedagogical excellence.

Last but not least, we are indebted to our families, as writing a book puts an extra burden on our close relatives – a burden that is heavily under-weighted. Hence having written this book reveals that we are ourselves of the behavioural type described in our book – not always totally rational and also motivated by things other than money.

In this chapter we summarize the current challenges in private banking and explain why wealth managers need behavioural finance. The concepts and insights suggesting how to transfer the research results into practical solutions are discussed in great detail in the rest of the book.

1.1 THE PRIVATE BANKING BUSINESS

Private banking offers exclusive wealth-related services to high net worth individuals.¹ The term “private” refers to the more personalized and exclusive nature of the offer as compared to the mass-market services accessible for other individuals such as retail clients and also as compared to services offered to institutional clients.

Private banking services can be offered by any financial intermediary whose main activity is the supply of exclusive financial and advisory services to wealthy private clients. Such financial intermediaries call themselves either “private banks” or they have a separate “private banking” or “wealth management” department serving the needs of wealthy private clients.

Case Study 1.1: Swiss private banking

Many financial institutes all over the world provide private banking services, but Swiss financial intermediaries have an indisputable leading position. Private banking has been a Swiss competence for more than 300 years. Today, almost one third of the international assets under management are with Swiss private banks, which makes the country the principle platform for private banking.² With 9 % of global assets under management, Switzerland is also the third largest wealth management centre in the world behind the US and the UK.³

Several factors contribute to Switzerland’s emergence as a leader in private banking. The country is famous not only for its neutrality and economic stability, but also for its liberal capital markets. In particular, private banking in Switzerland has a long tradition of confidentiality related to the Swiss banker’s professional duty of client privacy.⁴ Its outstanding reputation is also supported by the tradition of high-end services and committed staff. In Switzerland, a “private banker” is not simply an expert in a private

¹ Although high net worth is not defined, it generally refers to individuals with net worth greater than \$1 million.

² See www.swissprivatebankers.com.

³ See www.swissprivatebankers.com.

⁴ The Swiss banker’s professional duty of client confidentiality is rooted in Article 47 of the Federal Law on Banks and Savings Banks, which came into force on 8 November 1934.

Case Study 1.1: (Continued)

bank or in a wealth management department of a universal bank. The term refers to a specific definition in the Swiss Banking Law. In the words of Alfred E. Sarasin,

“A private banker is an entrepreneur in the privately-owned banking sector who conducts his business using his own assets, assuming unlimited liability with his entire fortune and exercising his independent power of decision.”

The Swiss banking sector plays also a very important role for the Swiss economy. At the end of 2005, banking balance sheet assets totalled 2.8 trillion Swiss francs, corresponding to six times the GDP of the country⁵ and wealth management alone accounts for more than half of the banks' value-added.⁶

The long tradition in private banking has an important role for the success of Swiss private banks. In a recent study Cocca and Geiger (2007) compare different private banks in Switzerland and 10 other countries.⁷ They find that Swiss banks surpass foreign competitors in Switzerland in profitability (compare return-on-equity ratios, ROE) as well as in operational efficiency (compare cost/income ratios in Figure 1.1).

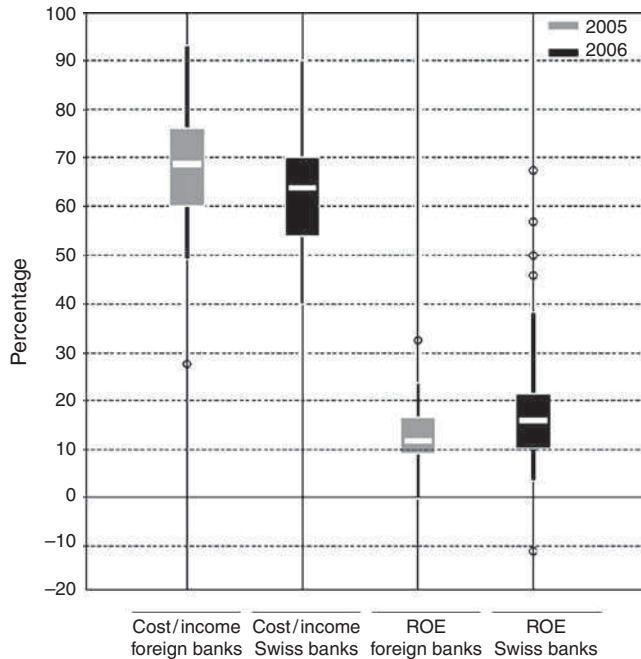


Figure 1.1 Efficiency and profitability of local and foreign banks in Switzerland

⁵ See www.snb.ch.

⁶ See www.swissprivatebankers.com.

⁷ “The International Private Banking Study 2007” by Cocca, T.D. and H. Geiger is available at www.isb.uzh.ch.