

# Investment Strategies of Hedge Funds

**Filippo Stefanini**



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**Filippo Stefanini**



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Adapted and updated from the original Italian, first published in 2005 by Il Sole 24 Ore.  
Translation by Laura Simontacchi.

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

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John Wiley & Sons Canada Ltd, 22 Worcester Road, Etobicoke, Ontario, Canada M9W 1L1

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***

Stefanini, Filippo.

[Hedge funds. English]

Investment strategies of hedge funds / Filippo Stefanini.

p. cm. — (Wiley finance series)

“Adapted and updated from the original Italian, first published in 2005 by Il Sole 24 Ore”—

Includes bibliographical references and index.

ISBN-13: 978-0-470-02627-4 (cloth : alk. paper)

ISBN-10: 0-470-02627-8 (cloth : alk. paper)

1. Hedge funds. I. Title. II. Series.

HG4530.S795 2006

332.67/253—dc22

2006016527

#### ***British Library Cataloguing in Publication Data***

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

ISBN-13 978-0-470-02627-4 (HB)

ISBN-10 0-470-02627-8 (HB)

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

Printed and bound in Great Britain by Antony Rowe Ltd, Chippenham, Wiltshire

This book is printed on acid-free paper responsibly manufactured from sustainable forestry in which at least two trees are planted for each one used for paper production.

# Contents

<b>Foreword</b>	<b>xi</b>
<b>Preface</b>	<b>xiii</b>
<b>Acknowledgments</b>	<b>xvii</b>
<b>About the Author</b>	<b>xix</b>
<b>1 A Few Initial Remarks</b>	<b>1</b>
1.1 What is a hedge fund?	1
1.2 History of hedge funds	2
1.3 Proprietary trading	4
1.4 The growth of the hedge fund industry	4
1.5 Main characteristics of the current industry	6
1.6 Capacity	8
1.7 Commissions	8
1.8 Industry performance overview	9
1.9 The hedge fund manager	12
1.10 Alpha and beta	12
1.11 Investment strategies	13
1.12 Explorers and frontiers	16
1.13 SEC's vigilance	16
1.14 Considerations on performance sustainability	16
1.15 Capacity and performance sustainability	17
1.16 Ability or chance?	17
1.17 The importance of avoiding losses	18
1.18 Decreasing returns with longer investment horizons	19
1.19 Business case: A hedge fund start-up	19

<b>2</b>	<b>Arbitrage</b>	<b>21</b>
2.1	The transaction costs barrier	22
2.2	ADR arbitrage	23
2.3	Arbitrage between off-the-run and on-the-run thirty-year Treasury Bonds	24
<b>3</b>	<b>Short Selling</b>	<b>27</b>
3.1	A brief history of short selling	27
3.2	What is short selling?	30
3.3	A simplified example of short selling on US markets	31
3.4	Who lends securities for short selling?	32
3.5	Regulations governing short selling	33
3.6	The risks of short selling	34
3.7	Short interest and short interest ratio	35
3.8	Wall Street's alter ego	36
3.9	Stock picking in short selling	37
3.10	The art of contrary thinking	41
3.11	Measuring the strategy's historical performance	42
3.12	Conclusions	45
<b>4</b>	<b>Long/Short Equity</b>	<b>47</b>
4.1	History of the first hedge fund	48
4.2	Market exposure	48
4.3	Management styles	52
4.4	Specialized long/short equity funds	55
4.4.1	Long/short equity technology-media-telecommunication (TMT)	56
4.4.2	Long/short equity biotech	57
4.4.3	Long/short equity gold	58
4.4.4	Long/short equity on emerging markets	58
4.5	Share class arbitrage	62
4.6	Pairs trading	62
4.7	Covered call and covered put options sale	64
4.8	Strategy's historical performance analysis	65
4.9	Equity market neutral	69
4.9.1	Equity market neutral strategy's historical performance analysis	70
<b>5</b>	<b>Merger Arbitrage</b>	<b>75</b>
5.1	A brief history of M&A	76
5.2	Strategy description	82
5.3	Risk associated with the outcome of an extraordinary corporate event	83
5.4	Types of mergers and acquisitions	86
5.4.1	Cash mergers or tender offers	86
5.4.2	Stock swap mergers or stock-for-stock mergers	87
5.4.3	Stock swap mergers with a collar	89



5.4.4	Multiple bidder situations	90
5.4.5	Leveraged buyouts and hostile takeovers	90
5.4.6	Spin-offs	92
5.5	Risk management	92
5.6	Strategy's historical performance analysis	93
5.7	Conclusions	96
<b>6</b>	<b>Convertible Bond Arbitrage</b>	<b>99</b>
6.1	Why issue a convertible bond?	101
6.2	A brief history of convertible bonds	101
6.3	The convertible bond market	102
6.4	Definitions	106
6.5	Quantitative models to value convertible bonds	107
6.5.1	Analytical models	108
6.5.2	Numerical models	109
6.6	Implied volatility and historical volatility	110
6.6.1	Credit spreads, implied volatility and risk appetite	110
6.7	Convertible bond arbitrage	110
6.7.1	Cash-flow arbitrage	111
6.7.2	Volatility trading	113
6.7.3	Gamma trading	117
6.7.4	Credit arbitrage	120
6.7.5	Skewed arbitrage	124
6.7.6	Carry trade	124
6.7.7	Refinancing plays	126
6.7.8	Late stage restructuring plays	126
6.7.9	Multi-strategy	126
6.8	Mandatory convertibles	126
6.9	Strategy's historical performance analysis	128
6.10	Risk control	132
6.11	Conclusions	133
<b>7</b>	<b>Fixed Income Arbitrage</b>	<b>135</b>
7.1	Issuance driven arbitrage or snap trade	137
7.2	Yield curve arbitrage	137
7.3	Intermarket spread trading	140
7.4	Futures basis trading or basis trading	140
7.5	Swap spread trading	140
7.6	Capital structure arbitrage	141
7.7	Long/short credit or credit pair trading	144
7.8	Carry trade	148
7.9	Break-even inflation trades	148
7.10	Cross-currency relative value trade	149
7.11	Treasuries over eurodollars (TED) spread or international credit spread	151

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7.12	Leveraged loans	151
7.13	Strategy's historical performance analysis	153
7.14	Conclusions	157
<b>8</b>	<b>Strategies on CDOs</b>	<b>159</b>
8.1	A brief history of CDOs	162
8.2	Hedge fund investment strategies	163
8.2.1	Carry trade	163
8.2.2	Long/short structured credit	164
8.2.3	Correlation trade	164
8.3	Conclusions	166
<b>9</b>	<b>Mortgage-Backed Securities Arbitrage</b>	<b>167</b>
9.1	A brief history of mortgage-backed securities	167
9.2	Originators of mortgage-backed securities	167
9.3	The industry of mortgage-backed securities	169
9.3.1	Pass-through securities	169
9.3.2	Collateralized mortgage obligations	170
9.3.3	"Interest Only" securities and "Principal Only" securities	170
9.4	The sensitivity of mortgage-backed securities to interest rates	171
9.5	Arbitrage on mortgage-backed securities	173
9.6	Risk factors	174
9.7	Strategy's historical performance analysis	174
9.8	Conclusions	178
<b>10</b>	<b>Distressed Securities</b>	<b>179</b>
10.1	A brief history of distressed securities	180
10.2	The distressed debt market	181
10.3	Bankruptcy laws	186
10.4	Strategy description	187
10.4.1	Securities involved	187
10.4.2	Investment thesis	192
10.4.3	The valuation process	194
10.4.4	Hedging techniques	195
10.5	Risks	195
10.6	A brief consideration of the directional nature of distressed securities hedge funds	196
10.7	Trade claims	198
10.8	Strategy's historical performance analysis	202
10.9	Conclusions	206
<b>11</b>	<b>Event Driven or Special Situations</b>	<b>207</b>
11.1	Activist investors	208
11.2	Strategy's historical performance analysis	211

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<b>12</b>	<b>Multi-Strategy</b>	<b>217</b>
12.1	Multi-strategy funds	217
12.2	Strategy's historical performance analysis	217
<b>13</b>	<b>Managed Futures</b>	<b>223</b>
13.1	What is a futures contract?	224
13.2	A brief history of managed futures	224
13.3	Managed futures strategy	225
13.4	"Do storks deliver babies?" and the predictability of financial time series	233
13.5	Strategy's historical performance analysis	233
13.6	Conclusions	238
<b>14</b>	<b>Global Macro</b>	<b>239</b>
14.1	A brief history of macro funds	240
14.2	Investment strategies adopted	242
14.3	The characteristics shared by great traders	242
14.4	The legs of a trade	243
14.5	The theory of reflexivity by George Soros	248
14.6	Debt emerging markets	249
14.7	Strategy's historical performance	255
14.8	Conclusions	258
<b>15</b>	<b>Other Strategies</b>	<b>259</b>
15.1	Holding company arbitrage	259
15.2	Closed-end fund arbitrage	260
15.3	Statistical arbitrage	261
15.4	Index arbitrage	262
15.5	Volatility trading	262
15.5.1	Option trading	263
15.5.2	Delta hedging	264
15.5.3	Variance swaps	264
15.5.4	Other instruments	264
15.6	Split-strike conversion	265
15.7	Lending	265
15.8	PIPEs or Regulation D	268
15.9	Real estate	270
15.10	Natural resources	270
15.11	Energy trading	274
15.12	Natural events	275
<b>16</b>	<b>Hedge Fund Performance Analysis</b>	<b>279</b>
16.1	Risks inherent in hedge fund investments	279
16.2	Hedge fund strategies indices	281
16.2.1	Benchmarking	282
16.3	Statistical analysis of indices	283

16.4	Value at risk	287
16.5	Statistical analysis of data from the LIPPER TASS database	289
<b>17</b>	<b>Conclusions</b>	<b>291</b>
	<b>Bibliography</b>	<b>295</b>
	<b>Index</b>	<b>299</b>

## Foreword

Hedge Funds. Rarely has a financial term stimulated such a broad spectrum of conflicting views. Hedge funds have been vilified by some people, and blamed for almost every negative occurrence in financial markets. This accusation is predominantly based on one famous hedge fund meltdown in 1998 which, some say, came close to toppling the global banking system. Hedge funds are often perceived to be the riskiest and most volatile of investments, buccaneers operating in an unregulated environment, using irresponsible and unwarranted leverage to deliver their returns. Hardly a week goes by without an article in the international press casting a shadow over the industry.

Other people have a diametrically opposed view. They exalt hedge funds as the best performing investments around and laud their managers as financial geniuses, turning some into superstars of the financial industry. This view maintains that hedge funds are able to protect investors' capital efficiently in times of financial market strife.

The truth, as is almost always the case, lies somewhere in between. Some hedge funds are populated by some of the best brains in the financial industry using sophisticated and very efficient investment strategies to deliver outstanding returns. Others are populated by mediocre talent and are run in a risky manner. The hedge fund industry is nothing more than a sophisticated part of the general investment industry as a whole, with money managers investing in an extremely diversified and extensive range of strategies.

Where does that leave most investors who want to evaluate and understand the hedge fund universe and take advantage of the talent that exists therein? In the vortex of opinion, counter-opinion and argument, investors need a guiding hand. Hedge fund investing requires a level of sophistication to understand both the risks involved and also the suitability of any investment relative to the objectives of the investor. Although such an assessment continues to be the role of an investment professional, publications such as this book are contributing to a much greater understanding of hedge fund investing among the wider investor audience.

In his book Filippo Stefanini has striven to demystify the hedge fund industry, shedding light on various strategies used to deliver returns. Filippo has reaffirmed the attributes I have come to know over the course of our professional collaboration these last four

years – diligence, precision and attention to detail – and combined these with the ability to present complex financial strategies and their background, clearly and succinctly.

This publication is a great educational tool for existing and potential investors in hedge funds.

Michael Perotti  
Alternative Asset Management Group  
Union Bancaire Privée

## Preface

The growth of the asset management industry was also fostered by the expansion of the range of products, honed to best satisfy the specific and diversified needs of investors.

In addition to traditional asset management products, such as mutual funds, so called alternative investments gradually grew in prominence. The main alternative investment products are hedge funds and funds of hedge funds, but they also include private equity and venture capital funds (Figure 0.1).

Alternative investments are characterized by a low correlation with traditional investments.

Since the first hedge fund was launched in 1949 by Alfred Winslow Jones, the hedge fund industry has grown impressively reaching the size of \$1.3 trillion and 8000 hedge funds. Often hedge funds are responsible for a big slice of the daily trading volumes of financial markets and they are counted among the best clients for brokers, given the level of trading fees they generate.

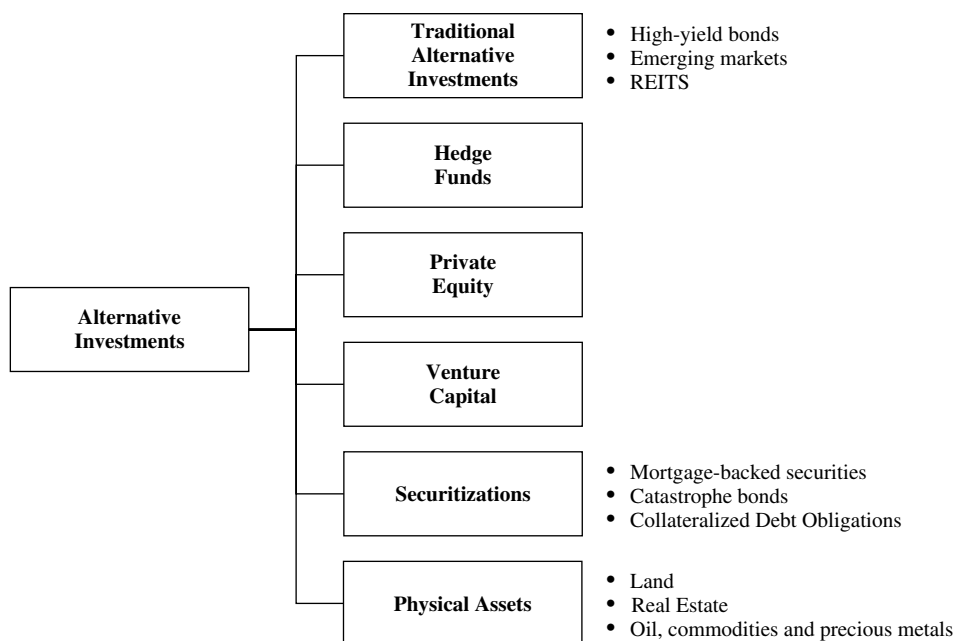
This exponential growth has led regulators to take a closer look at this phenomenon. The US Securities and Exchange Commission (SEC) has recently decided to increase the regulation requiring the registration of the investment advisors of the US hedge funds and the Financial Services Authority (FSA) already requires the investment advisors to be registered in the UK.

Nevertheless, this remarkable phenomenon is still surrounded by an aura of mystery. So, the goal of this book is to help readers to understand in detail the investment behavior of hedge funds.

Each chapter of this book is structured to cover the following subjects:

- strategy history;
- strategy's theoretical description;
- description of securities involved and size of the securities market;
- hedging techniques and possible use of derivatives;
- some trading examples;
- liquidity;
- leverage;
- risks and risk management.

We shall not get into the performances generated by single hedge funds, both to avoid investment solicitation and because past performances are not indicative of future returns.



**Figure 0.1** Alternative investments

This approach is consistent with the book’s aim, which is not intended to offer financial products, but rather to describe how hedge fund managers make a profit, and sometimes suffer a loss, following a market-uncorrelated approach.

At times we shall make use of investment examples to better clarify investment modalities, but these examples are in no way meant to form a judgment on the shares of listed companies. In most cases, they are examples of past deals that are closed, and therefore the conclusions reached by way of said examples may not be current anymore, and even more importantly may not be shared by the companies concerned. It should never be forgotten that past performances are not indicative of future performances.

Any performance entails the need to take a risk, so with this in mind we tried to carry out a critical analysis of the opportunities and risks of the many investment strategies adopted by hedge funds.

Just as during the Italian Renaissance apprentices would learn their crafts and art from great artists, today generations of young money managers are forming around great managers, so that one day they will leave the “shop” to launch their own hedge fund. Only a few exceptionally talented managers can manage successful hedge funds. There are things that can be taught and things that can be learnt only through practice. Investing is a discipline lying halfway between art and exact science. Maybe the only way to get hold of the secrets of this industry is to work in a privileged observatory, as fund of hedge fund managers do, meeting or talking daily with hedge fund managers.

There is no school where investment strategies can be taught, because each strategy is unique and original, and can be learnt only through hands-on experience.



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Finally, we discourage new managers from trying to implement these very same investment strategies: this is no manual, and it is not intended to explain how to implement an investment strategy. The theoretical aspect is but the first step. However, should any of our readers feel tempted to implement these strategies, just bear in mind that practice can widely differ from theory.

*Strategy is easy, execution is hard!*

Filippo Stefanini  
Milan, April 2006



## Acknowledgments

My special thanks go to my wife Silvia for her patience, insight and encouragement, and to my parents Carlo and Laura and my grandmother Dina, without whose help this book would never have been written.

I would like to thank Giovanni Maggi, Stefano Ticozzi and Davide Elli, my colleagues in Aletti Gestielle Alternative SGR, for reviewing the drafts of my book. In particular, I thank Davide Elli for helping me with the description of trading examples and with volatility trading, and Stefano Ticozzi for having helped me find all the Bloomberg pictures for this book.

I am grateful to Bruno Redini, consultant with Aletti Gestielle Alternative SGR, for helping me correct the book's drafts and for his invaluable comments.

I would like to thank François-Serge Lhabitant, Professor of Finance at Edhec in Paris and at the Ecole des Hautes Etudes Commerciales of the Lausanne University, for his advice on the work's structure; Alessandro Fassò, Professor of Statistics at the Faculty of Engineering with the University of Bergamo, for helping me with the statistical analysis of hedge fund index performances; and many hedge fund managers for helping me assemble trading examples.

Over the years, I have had the privilege of meeting a group of exceptional hedge fund managers: I would like to thank each of them for helping me understand their working approach.

It is evident that any mistakes in the book are the author's sole responsibility.



## About the Author



Filippo Stefanini is deputy Chief Investment Officer in Aletti Gestielle Alternative SGR, an Italian alternative investment company that specializes in managing funds of hedge funds. This company is part of the banking group Banco Popolare di Verona e Novara and at December 31st 2005 has assets under management of €1.5 billion.

In 1998 he graduated with first-class honors in Industrial Engineering from Bergamo University, and began working as a consultant for Accenture in the Asset Management and Investment Banking areas in 1999. Since 2001 he has worked for Aletti Gestielle Alternative SGR, having participated in the start-up project. He was co-author of the 2002 book *Hedge Funds: to invest for generating absolute returns*. In 2005, he authored the book *Hedge Funds: the investment strategies*. Both books were published in Italy by Il Sole 24 Ore.

He is fluent in English and French and is married to Silvia Locatelli.



## A Few Initial Remarks

### 1.1 WHAT IS A HEDGE FUND?

In the United States, the country where they first appeared and enjoyed the greatest development, there is no exact legal definition of the term “hedge fund” that outlines its operational footprint and gives a direct understanding of its meaning.

Yet, to rely on the literal meaning of hedge fund, i.e. “investment funds that employ hedging techniques”, could be misleading, because it relates merely to just one of the many traits of hedge funds and makes reference to only one of the many investment techniques they deploy.

A more fitting definition in our opinion is the following: “A hedge fund is an investment instrument that provides different risk/return profiles compared to traditional stock and bond investments”.

To appreciate the meaning fully, however, it is necessary to remark that hedge funds make use of investment strategies, or management styles, that are by definition alternative, and that they do not have to fulfill special regulatory limitations to pursue their mission: capital protection and generation of a positive return with low volatility and low market correlation.

Hedge funds are set up by managers who have decided to take the plunge into self-employment, and whose backgrounds can be traced to the world of mutual funds or proprietary trading for investment banks.

The differences between hedge funds and mutual funds are manifold.

The performance of mutual funds is measured against a benchmark, and as such it is a relative performance. A mutual fund manager considers any tracking error, i.e. any deviation from the benchmark, as a risk, and therefore risk is measured in correlation with the benchmark and not in absolute terms. In contrast, hedge funds seek to guarantee an absolute return under any circumstance, even when market indices are plummeting. This means that hedge funds have no benchmark, but rather different investment strategies.

Mutual funds cannot protect portfolios from descending markets, unless they sell or remain liquid. Hedge funds, however, in the case of declining markets, can find protection by implementing different hedging strategies and can generate positive returns. Short selling gives hedge fund managers a whole new universe of investment opportunities. It is not the general market performance that counts, but rather the relative performance of stocks.

The future return of mutual funds depends upon the direction of the markets in which they are invested, whereas the future return of hedge funds tends to have a very low correlation with the direction of financial markets.

Another major difference between hedge funds and mutual funds is that the latter are regulated and supervised by Regulatory Authorities, and are bound by limitations restricting their portfolio makeup and permitted instruments. Moreover, investors are further protected by obligations burdening the management company in terms of capital adequacy, proven robust organization and business processes. On the contrary, the absence of a stringent

regulatory framework for hedge funds leaves the manager with greater latitude to set up a fund characterized by unique traits in terms of the financial instruments to be employed, the management style, the organizational structure and the legal form.

Therefore, the hedge fund industry is marked by a great heterogeneity, in that it is characterized by different investment strategies and by funds of a wide variety of sizes.

Although hedge funds immediately bring to mind the image of innovative investment strategies within the financial landscape, the first hedge fund came into existence more than half a century ago.

## 1.2 HISTORY OF HEDGE FUNDS

This section details some of the important events in the history of hedge funds.

Back in 1949, Alfred Winslow Jones, a former reporter for *Fortune*, started the first hedge fund with an initial capital of only US\$100 000. Jones' core intuition was that by correctly combining two speculative techniques, i.e. using both short sales and leverage, it would be possible to reduce total portfolio risk and construct a conservative portfolio, featuring a low exposure to the general market performance. Jones also had two other major ideas: to cater to investors, he had invested all his savings in the fund he managed, and his profit came from a 20 % stake in the generated performance rather than from the payment of a fixed percentage of assets under management. This approach made it possible to bring the interests of manager and investor together.

Today, the archetype described above characterizes only a small number of hedge funds: the term is now used to refer to a vast realm of different management models.

At present, a hedge fund has five main characteristics:

- The manager is free to use a wide range of financial instruments.
- The manager can short sell.
- The manager can use leverage.
- The manager's profit comes from a management fee, which is fixed and accounts for 1.5–2.5 %, and from a 20–25 % fee on profits. Generally, the performance or incentive fee is applied only if the value of the hedge fund unit grows above the historical peak in absolute terms or over a one-year period.
- The manager invests a sizable part of his personal assets in the fund he manages, so as to bring his own interests in line with those of his clients.

In 1952, Jones opened up his partnership to other managers and started to hand over to them the management of portions of the portfolio, and within a short period of time he assigned them the task of picking stocks. Jones would allocate the capital among his managers, monitor and supervise all investment activities and manage the company's operations. The first hedge fund in history turned into the first multi-manager fund in history.

In 1967, Michael Steinhardt started Steinhardt, Fine, Berkowitz & Company with eight employees and an initial capitalization of \$7.7 million. Steinhardt began his career as a stock picker and then, as his hedge fund grew, shifted to a multi-strategy fund. In the 1980s Steinhardt became head of a hedge fund group with roughly US\$5 billion of assets under management and with over 100 employees. Steinhardt ended his hedge fund career in 1995 after suffering big losses in 1994.

By 1969, the US Securities and Exchange Commission (SEC) had started to keep a watchful eye over the blossoming industry of hedge funds as a result of the rapid growth



in the number of new hedge funds and of assets under management. At that time, the commission estimated that approximately 200 hedge funds were in existence, with \$1.5 billion of assets under management. 1969 was also the year that George Soros created the “Double Eagle” hedge fund, the predecessor of the more renowned Quantum Fund.

The first fund of hedge funds<sup>1</sup> was Leveraged Capital Holdings, created in Geneva in 1969 by Georges Karlweis of Banque Privée Edmond de Rothschild, which had the purpose of investing in the best single-managers of the time. Leveraged Capital Holdings also represents the first European hedge product.

In 1971, the first US fund of funds was started by Grosvenor Partners, and in 1973, the Permal Group launched the European multi-manager and multi-strategy fund of funds, called Haussmann Holdings N.V. The people who were given the task of creating the investment team for Permal were Jean Perret and Steve Mallory (hence the name Permal).

Then, in 1980, Julian Robertson and Thorpe McKenzie created Tiger Management Corporation and launched the hedge fund Tiger with an initial capital of \$8.8 million. In 1983, Gilbert de Botton started Global Asset Management (GAM), a company specializing in the management of funds of hedge funds, which in 1999 was acquired by UBS AG and by the end of 2004 had some €38 billion of Assets under Management (AuM).

At the beginning of the 1990s, Soros, Robertson and Steinhardt managed macro funds worth several billion dollars and invested in stocks, bonds, currencies and commodities all over the world, trying to anticipate macro-economic trends.

In 1992, alternative investment instruments started to draw the attention of the press and of the financial community, when George Soros’s Quantum Fund made huge profits anticipating the depreciation of the British pound and of the Italian lira.

The early 1990s were the heyday of macro funds. The exit of the British pound and the Italian lira from the European Monetary System in September 1992 allowed Soros to cash in an incredible profit of \$2 billion.

On 4th February 1994, the Fed unexpectedly introduced the first rate hike of one quarter of a percentage point, which caused US treasuries to topple and led to a temporary drain of liquidity on the markets. The twin effect of panic on the markets and leverage proved disastrous for Steinhardt Partners, which in 1994 suffered a loss of 31 %. Steinhardt decided to retire at the end of 1995, despite the fact that during that year he had been able partly to recover the 1994 losses, ending 1995 up 26 %.

Later on, hedge funds bounced back into the headlines when in the first nine months of 1998 Long Term Capital Management, managed by John Meriwether and a think tank including two Nobel laureates in Economics (Myron Scholes and Robert Merton), generated a staggering \$4 billion loss, starting a domino effect that left many banks, financial institutions and big brokers in many countries teetering on the brink of default. Only the prompt intervention of a bail-out team led by the Federal Reserve of Alan Greenspan avoided the onset of a systemic crisis.

In October 1998, when the Japanese yen appreciated against the dollar, Robertson suffered a loss of about \$2 billion. In 1999, his long/short equity strategy, based on the analysis of fundamentals of listed companies, did not work at all in the market driven by the tail wind of the New Economy. After withdrawals from investors, assets under management had plunged from \$25 billion in August 1998 to less than \$8 billion at the end of March 2000.

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<sup>1</sup> Ineichen, A.M. (2003) *Absolute Returns: The Risk and Opportunities of Hedge Fund Investing*, John Wiley & Sons, Inc.

At the end of March 2000, when the “dot-com” speculative bubble was at its peak, Robertson announced the liquidation of the Tiger Fund.

In April 2000, George Soros changed his chief investment strategist and soon after the CEO of Soros Fund Management LLC as well. Soros announced to his investors that he would stop making large leveraged macro investments. To reduce the risk he would downsize his return objectives.

### **1.3 PROPRIETARY TRADING**

The world of hedge funds borders with that of proprietary trading in investment banks.

Proprietary trading desks are made up of groups of managers, who manage the proprietary book of banks following the same techniques and financial instruments employed by hedge funds. This affinity is further evidenced by the fact that many hedge fund managers have a past experience in proprietary trading desks for the most prestigious investment banks. The main difference lies in the fact that in a hedge fund the manager is also the owner, whereas proprietary trading managers are employees of the banks and only part of their variable wage is linked to the performance of the portfolio they manage.

Another difference is that the hedge fund industry puts an emphasis on monthly results, whereas the time horizon on which the performance of proprietary trading desks is measured is tied to the bank’s quarterly reports.

Before the crisis in August 1998, proprietary trading played quite a role in the income statement of financial institutions. Immediately after the financial crisis of August 1998, which led to sharp losses, many proprietary trading desks were closed or segregated off the balance sheet by creating hedge funds. At present, proprietary trading is making a comeback, even though there is no one single model.

### **1.4 THE GROWTH OF THE HEDGE FUND INDUSTRY**

Hedge Fund Research estimates that the number of hedge funds has gone from 610 in 1990 up to 7436 in 2004 (not including funds of hedge funds). Assets managed by hedge funds went from an estimated \$38.9 billion in 1990 to approximately \$973 billion in 2004.

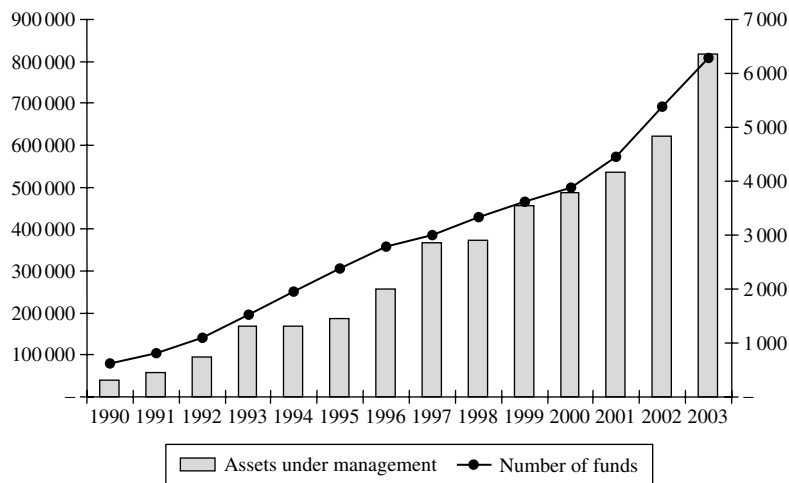
According to Tremont Capital Management Inc., at the end of 2004 the hedge fund industry reached \$975 billion of assets, in addition to another \$300 billion held in managed accounts, totaling \$1275 billion of AuM. Various sources agree in estimating that the number of active hedge funds is running at about 9000, with approximately 3500 managers.

In the period between 1990 and 2003, as shown in Figure 1.1, assets under management grew at a compound annual growth rate of 26 %, while the number of funds grew at a rate of 20 %.

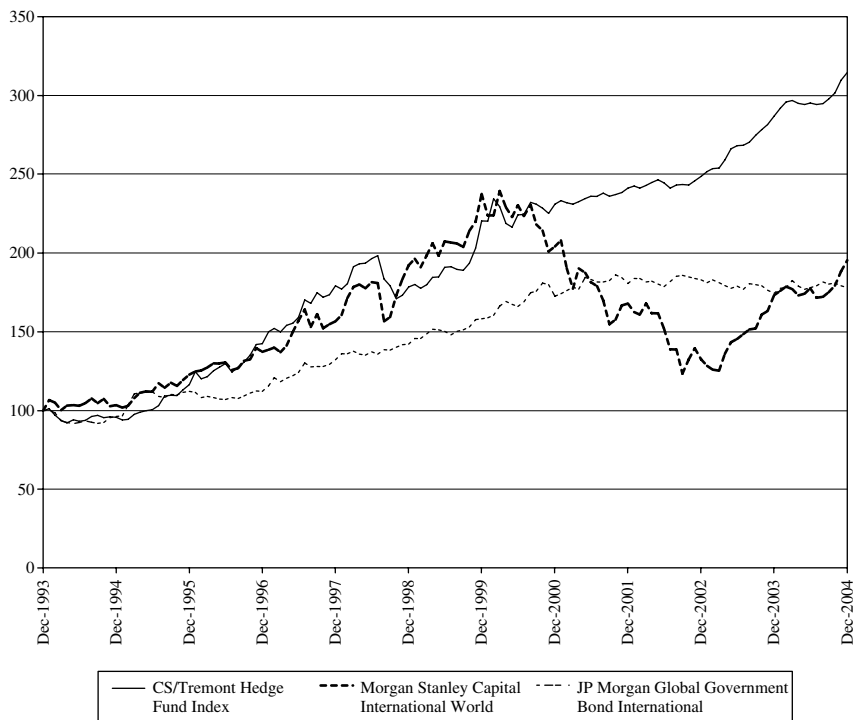
A trillion dollars accounts for about 1.3 % of the total capitalization of financial markets, excluding the leverage, or 3.5 % including the leverage. Therefore the hedge fund industry can be considered a niche sector.

Why then bother with an industry that accounts for only 3–4 % of the assets of global financial markets? First, because it is estimated that hedge funds make up 10 % of market trade volumes, and second because this is the industry where some participants seem to be able to generate a market-uncorrelated performance.

Figure 1.2 compares the cumulative returns of the hedge fund industry with the cumulative returns of stock and bond markets in the period between 1994 and 2004. Note that as of March 2000, while global stock markets started to slip, hedge funds on average were able to protect their capital and to generate positive returns with a low volatility.



**Figure 1.1** The growth of the hedge fund industry. The left scale represents the assets under management in billion US dollars and the right scale is the number of hedge funds from 1990 to 2003. Source: Hedge Fund Research, Inc. © HFR, Inc.2004, [www.hedgefundresearch.com](http://www.hedgefundresearch.com). Reproduced by permission of Hedge Fund Research, Inc.



All indices are expressed in US dollars.

**Figure 1.2** Cumulative returns of the hedge fund industry compared with cumulative returns of stock and bond markets from 1994 to 2004. Source: Bloomberg L.P.

## 1.5 MAIN CHARACTERISTICS OF THE CURRENT INDUSTRY

Hedge funds are characterized by the use of alternative management styles or investment strategies, which is in fact what this book intends to analyze.

Figure 1.3 shows the makeup of the hedge fund industry by investment strategy at the end of 2004, measured as a percentage of assets under management. It is clear that the two main investment strategies are long/short equity, with 33 %, and the event driven style, which accounts for 19 % of the market share.

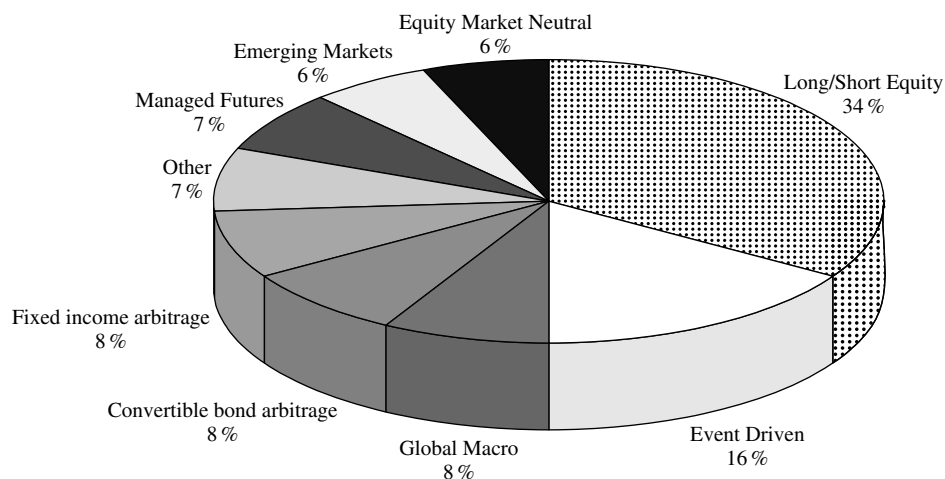
It is also worth examining the hedge fund industry distribution by size. For this type of analysis, we took into consideration only hedge funds that had been operating for at least five years, and we examined asset data as of 31st December 2004 supplied by the LIPPER TASS database. Since the hedge fund assets supplied by this database are denominated in various currencies, we translated all of them into dollars at the exchange rate in force on 31st December 2004.

The resulting industry's actual profile is illustrated in Figure 1.4: each bar of the chart represents the sum of the assets of all hedge funds that belong to that size bracket. Size brackets have been arbitrarily chosen to be seven.

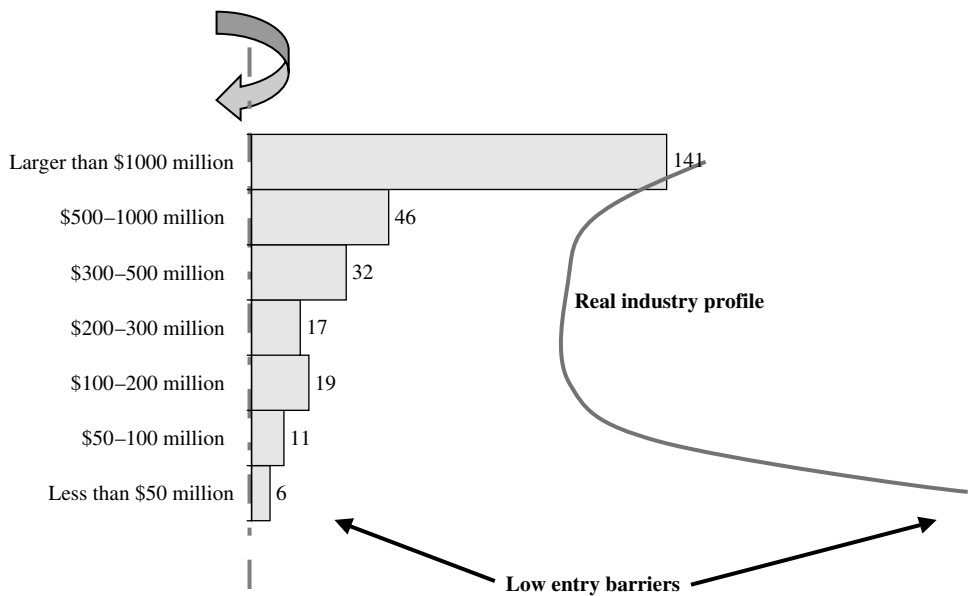
Clearly, the hedge fund industry proves to be heterogeneous in terms of fund size.

In reality, the industry's actual profile should also include the myriads of hedge funds that have little assets under management, that were launched a short time ago, and that are not releasing their performance data to any database yet.

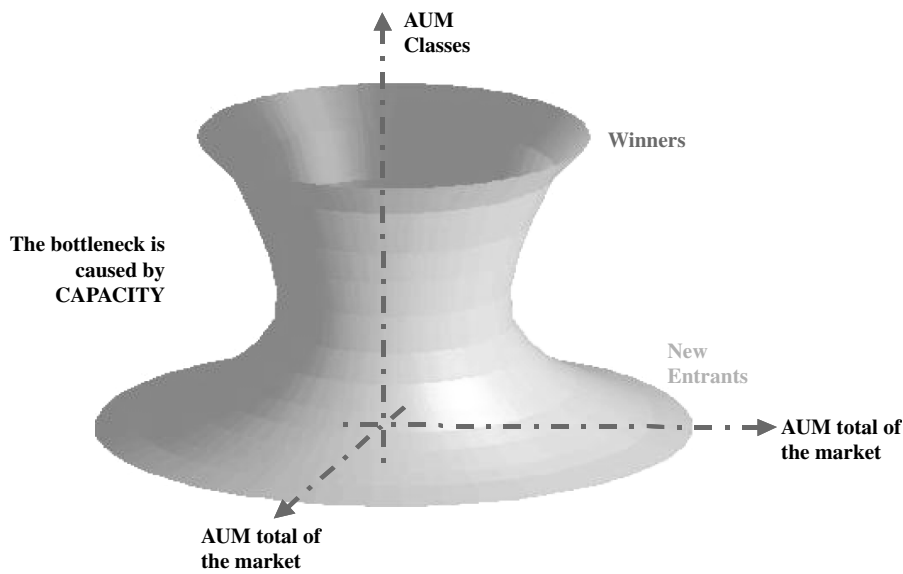
The low barriers to entry characterizing the hedge fund universe lead us to assume a size distribution with a completely different shape: see the curve in Figure 1.4. Let us rotate the bar chart 360° around the dotted axis shown in the chart. Figure 1.5 shows the industry shape subdivided by homogeneous size brackets: we obtain a "vase" shape. According to some journalists we have opened up Pandora's box! Successful hedge funds are those that have reached a bigger size and over time have achieved a consistent performance. The base of



**Figure 1.3** Makeup of the hedge fund industry by investment strategy at the end of 2004 (percentages of assets under management). Source: LIPPER TASS, Tremont Capital Management, Inc.



**Figure 1.4** Profile of the hedge funds industry for dimensional classes at the end of 2004. Source: calculation on LIPPER TASS data



**Figure 1.5** Pandora’s box?

the “vase” is represented by new entrants, as well as by hedge funds that are having trouble generating returns.

The hedge fund industry is characterized by low barriers to entry for new managers: investment banks roll out the red carpet for managers who wish to launch a new hedge

fund. The reason is that hedge funds are great clients for investment banks, as a result of the substantial brokerage fees they pay on the purchase and sale of financial instruments. In addition to brokerage services, investment banks even provide them with office space, technological infrastructures, risk management systems, and through their *capital introduction* systems, they also take care of the fund's marketing among final investors.

Low barriers to entry and the appealing fee structure brew an explosive mixture fostering the proliferation of new hedge funds. This phenomenon is heightened further by the strong demand for quality hedge funds on the part of investors. For a successful manager it is very easy to raise money to invest. As we will see in some numerical examples later on, every hedge fund manager knows all too well that the greater the amount of money he manages, the higher the fees he is going to earn. Why then do the assets managed by hedge funds not grow exponentially? The reason lies in the so-called capacity issue, which is what determines the bottleneck in the "vase" depicted in Figure 1.5.

## 1.6 CAPACITY

The largest equity mutual fund is Vanguard's index fund S&P 500, with more than \$94 billion of assets under management, while the biggest fixed income fund is Pacific Investment Management Company's Total Return Fund, with a capital of €73 billion at the end of 2003. Vanguard and Fidelity manage \$675 and \$955 billion, respectively.

Often, hedge funds that are closed to new capital do not disclose their performance to databases and therefore elude the classifications of journalists who have but a hazy knowledge of the hedge industry. In recent years, no two similar classifications have been published with regard to major hedge funds when weighted by assets under management.

The hedge fund business is no scalable business, due to the inherent diseconomies of scale. Assets managed by a hedge fund cannot exceed a certain limit, called capacity, without negatively affecting its performance. Beyond given limits, additional capital prevents the replication of relative value strategies and dilutes returns, obliging hedge funds to take on a greater directional risk in the attempt to keep up their performance.

Because capacity limits the size of hedge funds, the assets managed by the largest hedge funds are definitely less than those managed by the largest mutual funds.

## 1.7 COMMISSIONS

Some funds have become famous for their performance, their size, the aura of mystery surrounding them – since they release information only to their investors and are closed to new investors – and for their commissions, which have been said by some investors to be "outrageous". If we analyze the most extreme cases, we find a group with annual management fees of 6–7 % and performance fees of 20 %; another group charges no management fees but its performance fees are 50 % of profits; other groups charge a 3 % annual management fee and performance fees account for 30 % of profits.

Most hedge funds charge their clients with performance fees accounting for about one fifth of profits, but you can get as high as one fourth, one third or even half the gains generated by the hedge fund.

A hedge fund's rewarding system is asymmetric. Fund managers receive a portion of the profits but do not share in the losses. If a manager suffers a loss, he tends to take on greater risks to start showing a profit again.