



A guide to
**Fund
Management**

BY DANIEL BROBY

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By
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Preface

The fund management industry performs the professional management and administration of investment assets on behalf of its clients. The terms “fund” and “asset” management refer to the management of all forms of institutional investment, including the collective management of the wealth of private individuals. As a result, this is a large and important segment of the finance industry. In 2010, the industry had some US\$62 trillion of assets under management, generating fee revenue of over USD\$500 billion.

In order to capture the revenue opportunity, senior officers in fund management companies have to apply best practice and understand operational issues. This is not as easy as it sounds. There are numerous calls on their time, and their core focus should always be investment performance. This Executive Report was written to address the resultant time optimisation dilemma.

A Guide to Fund Management combines accepted industry best practice, structure, operations and procedures. As a result, readers can spend less time rummaging through industry white papers and more time on the strategic direction of the firm.

The Executive Report has been written to be as up to date as possible, making it more relevant than the multitude of papers and operational notes that senior management is usually confronted with. It aims to offer a one-stop shop on how to run a firm, addressing such key issues as:

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- ◆ The different approaches to fund management;
 - ◆ Revenue models;
 - ◆ Complex regulation; and
 - ◆ Legal structures;
 - ◆ Best practices and how to implement them;
 - ◆ Performance generation and persistence;
 - ◆ Clear and concise operational descriptions and functions;
 - ◆ How to make the firm client-centric;
 - ◆ Product development; and

- ◆ The threat and opportunities from alternatives to mainstream fund management.
-

In addressing these issues, this report should assist directors, executive committees, finance committees, investment committees and consultants in effectively managing, monitoring and evaluating the operations of a fund manager.

It has been written in plain English, which should hopefully prove a refreshing change for those daunted by the regulatory overlay. In that way it should also help senior officers ensure compliance with fiduciary and prudential investor responsibilities. This Executive Report can also be used as an educational tool.

The following pages present typical structures used by fund management firms to build their business, and is intended to help senior management maintain the consistency of investment processes, something which is necessary to produce good long-term performance – and hence success.

Introduction

A Guide to Fund Management is intended as a manual, not an industry study. It aims to give the reader a readily accessible overview of what it takes to set up the procedures required to be successful in fund management. In its compilation, the intention was to follow conventional wisdom. Examples of this include the concept that exposure to the market is easy to come by, while true skill in beating the market is hard to find, and that correlation, compliance and risk control are crucial. Such generally accepted ideas have implications in a number of areas, such as the strategic positioning of the firm, the investment process, the investment style, benchmarks and even the overall framework of fiduciary duties.

The fund management industry fits well with the neoclassical theory of the firm as proposed by Ronald Coase. This states that, in theory:

-
- ◆ Fund managers function freely;
 - ◆ Prices and technology are known by all interested parties; and
 - ◆ Owners are effective in control and the use of their assets.
-

As a result, the biggest barrier to the free functioning of the industry is information cost; this Executive Report will therefore focus on this within the operations and technology aspects as well as the process and people. Regardless of how well defined the process is, the role for management is important in its implementation and the oversight of the systems. This is because in practice, the industry is not as frictionless as theory suggests.

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- ◆ Strong investment process that determines how to achieve goals and monitor investments.
 - ◆ Robust valuation procedures that call for a segregation of responsibilities, thorough written policies, oversight and other measures for the valuation of assets.

- ◆ Comprehensive risk management that emphasises measuring, monitoring and managing risk, including stress testing of portfolios for market and liquidity risk management.
- ◆ Sound and controlled operations and infrastructure, supported by adequate resources and checks and balances in operations.
- ◆ Specific practices to address conflicts of interest and promote the highest standards of professionalism and a culture of compliance.

In the following pages, the full spectrum of the ways in which a fund manager addresses different investments is covered, ranging from active to passive management. The divergent approaches to delivering investment outcomes exhibit differing characteristics – there is no right template. There are as many different approaches as there are fund managers. That said, different approaches have some commonalities, to some degree, as can be seen in Table 1.

Table 1.1 Active versus passive fund management

	Active management	Passive management
Sharpe Ratio	High	Low
Transparency	Low	High
Risk exposure	Complex	Simple
Controls	Few	Many
Capacity	Limited	High
Process	Elaborate	Transparent
Fees	High	Low

Looking at the structure of this Executive Report, Chapter 1 focuses on the business model, and provides a short summary of how the fund management industry evolved. It presents the data and salient points necessary to make the business scalable and profitable. Chapter 2 then gives more information on the industry and how it is structured, both geographically and from an investment perspective. It offers a few key data points, although these can become dated very quickly. To round off the industry assessment, Chapter 3 then looks at business from the perspective of its clients, explaining how to target the right segment.

Chapter 4 assesses the industry within the context of its legal and regulatory framework, and includes top-level discussion, such as on regulatory trade-offs, as well as day-to-day instruction on how to operate and maintain adequate compliance functions and procedures.

The report then moves onto investment performance, with Chapter 5 addressing the engine room of a fund manager by focusing on the investment process and philosophy. It includes a section on understanding the mathematical relationship between risk and return, and debates the pros and cons of active versus passive management debate. In a similar fashion, Chapter 6 reviews the skills and structure in the front office, and covers portfolio construction and support, as well as incorporating the process-driven value proposition into daily activities.

The remainder of the people side of the firm is addressed in the following three chapters. Chapter 7 reviews the skills and structure in the middle office, with a focus on risk oversight policy implementation, as well as performance systems. Chapter 8, meanwhile, reviews the skill and structure in the back office, focusing on operations and support. It highlights the importance of having robust systems and database and ensuring efficient pre- and post-trade processing. Finally, Chapter 9 lists and details job functions, giving valuable advice on how to write internal and external job descriptions and the criteria for “good” and “bad” remuneration policies.

The next four chapters focus on the client. Chapter 10 delves into the important issue of client acquisition, addressing business development as a means to win new clients. It offers some useful advice, such as how to ensure efficient “client on-boarding.” Chapter 11 follows on with the equally important subject of client retention. This involves communicating with clients, consultants and distribution channels. Essentially, the message is to understand and surpass expectations. It includes a section on buying a fund management company, and contains many due diligence pointers. Chapter 12 continues the client focus theme by considering performance reporting and valuation. This includes choosing appropriate benchmarks and understanding attribution analysis. There is also a lot of helpful advice on reporting formats. Chapter 13 explains product design, and includes advice on building the product, through to composition and the structure of the product team.

Chapter 14 concludes with an investigation into alternatives to traditional fund management. These range from socially responsible investment, to structured products, to hedge funds and private equity.

This Executive Report also includes a Glossary, to help readers unfamiliar with some of the main terminology used in the industry.

About the Author

As a senior figure in the asset management industry, Daniel Broby is a champion of capital markets. His focus on high level principals, integrity and best practice underlie his professional success.

Daniel built his career on the back of a strong grounding in finance theory. He has an MPhil in economics and an MSc in investment analysis. He was elected an individual member of the London Stock Exchange in 1990; is a Fellow of Chartered Institute of Securities and Investment; a Fellow of CFA UK; and a Visiting Fellow at Durham University. He was presented with the CFA Institute's Society Leader Award in 2006.

Daniel has had a number of 'C' level positions at the largest asset managers in Scandinavia and Russia. These include chief executive officer, chief investment officer and chief portfolio manager. His career, however, has revolved around the London market. He was a board member of CFA UK, and its predecessor, for over 10 years.

Daniel's focus has always been active asset management. His success in investment performance was recognised by Morningstar who rated the flagship fund he managed for eight years with five stars

Daniel has pioneered a number of investment solutions. He introduced the first regulated hedge fund and pioneered structured products in the Danish market. He has launched various investment funds, including a number focused on frontier markets such as Africa.

Daniel has written two highly recognised books on the profession and numerous articles for industry journals. He was commissioned by the *Financial Times* to write *The Changing Face of European Fund Management*.

Daniel has also contributed to the body of financial knowledge by writing *A Guide to Equity Index Construction* for Risk Books. *Securities & Investment Review* observed that it "explores in intricate detail the various workings of modern portfolio theory, choosing a benchmark, measuring risk and sampling and selection procedures." *Professional Investor* magazine opined that "rarely does a book genuinely represent a first in its field."

Glossary of terms

Active management

A process where securities held in a fund's portfolio are bought for the purpose of risk-adjusted outperformance, and traded as conditions change, presenting new market opportunities.

Alpha

A measure of the risk-adjusted performance of an investment that factors in the individual risk of the security and not the overall market risk.

Annual return

The total return per year from an investment, including dividends or interest and capital gains or losses, but excluding commissions and other transaction costs and taxes.

Annualise

The conversion to an annual basis. For example, if a fund earns 1% in a month, it would earn 12% on an annualised basis, by multiplying the monthly return by 12.

Asset

Stocks, bonds or cash equivalents, such as Treasury bills.

Asset allocation

Apportioning of investment funds among categories of assets, such as between cash, stocks and bonds.

Asset class

A class of investments that have similar characteristics, including risk factors and how returns are created.

Asset mix

The weights of all the asset classes in a portfolio.

Assets under Management (AUM)

The industry metric for determining the size of a fund manager by the funds that they have discretion over managing.

Backtesting

The process of comparing predictions from a forecasting model to observable data. A model may be run using historical inputs, after which the forecast is compared to the actual outcomes observed for the forecasted period.

Basis point

A unit equal to 1/100 of 1%. There are 100 basis points in each percentage point.

Benchmark

An independent rate of return (or hurdle rate) forming an objective test of the effective implementation of an investment strategy.

Beta

A measure of the extent to which a portfolio's return moves in line with the market return. A beta of 1 means that each upward or downward movement of 1% in the market should, all other things being equal, generate a 1% upward or downward movement in the portfolio. A beta less than 1 (greater than 1) implies that a 1% market movement should, all other things being equal, generate a less than (greater than) 1% movement in the portfolio.

Capacity

The amount of AUM a particular investment strategy can accommodate.

Capital gain

The amount by which the net proceeds from the resale of a capital item exceeds the book value of the asset.

Cash and cash equivalents

The Financial Accounting Standards Board (FASB) defines cash equivalents as any highly liquid security with a known market value and a maturity, when acquired, of less than three months.

Collateralised debt obligation

A multi-tranche security with credit risk exposure to corporations, a securitisation of corporate obligations.

Counterparty

A term used to identify the other party in a two-party transaction. For example, the counterparty of a buyer is the seller to that buyer.

The term counterparty is frequently used to identify the other party in repurchase agreement transactions and in interest rate swap transactions.

Counterparty risk

The risk that a counterparty will default or fail to perform on its obligation under a contract.

Credit quality

A measurement of a company's ability to repay a debt obligation. This measurement helps an investor to understand an issuer's ability to make timely interest payments and repay the loan principal upon maturity.

Credit risk

Refers to the risk that the issuer or backer will default in the payment of interest and/or principal on a security.

Custodian

A financial institution that physically holds and safeguards the security certificates, or other assets of a customer. Custodians often act as intermediaries between the investment purchaser and seller, and provide a number of services such as record keeping and settlement of trades.

Defined contribution

A contribution-related pension where contributions are paid into an individual account. The returns on the investment (which may be positive or negative) are credited to the individual's account.

Distributor

The distributor is the connecting link between the fund's owners as consumers and the fund managers as producers of investment products. They can take many forms, depending on whether the sale is through direct or indirect channels, or if the distribution is internal or external.

Diversification

The spreading of risk by dividing an investment portfolio into multiple categories of instrument types by sector, maturity and quality rating (eg, stocks, bonds and money market funds).

Duration

A measure of the price sensitivity of a bond to changes in interest rates. Duration is the average time, in years, to the receipt of all cashflows from a debt security. These cashflows are weighted by their relative value.

Efficient market hypothesis (EMH)

An investment theory that postulates it is impossible to "beat the

market” because stock market efficiency causes stock prices to incorporate and reflect all relevant information in all cases.

Emerging markets

Capital markets, usually stock markets that are relatively new and underdeveloped. Usually located in countries with lower per capital incomes compared to the more developed economies.

ERISA

The US Employee Retirement Income Security Act of 1974, a law which guarantees certain categories of employees a pension and the way it should be managed.

Fiduciary

The designation of a person who holds something in trust for another. It defines the level of responsibility of trustees, advisers, managers and consultants who act in a co-fiduciary capacity to their institutional clients.

Futures

Agreements to buy or sell a specified amount of a commodity or financial instrument at a particular price on a stipulated future date.

Index

A defined sample of assets that measures the return of a representative group of an asset class.

Interest rate risk

The risk that market value will fall due to changes in general interest rates. This could cause an investment in a fixed-income security to increase or decrease in value inversely to the change in interest rates.

Intermediaries

Third-party sales agents of fund management products and services.

Investment advisor or consultant

Advisors or consultants are specialised investment advisory firms. The function is primarily fee-driven. A consultant helps investors with their long-term investment planning.

Investment strategy

Investment strategy consists of market timing and security selection within the individual asset classes.

Investment time horizon

The length of time a sum of money is expected to be invested. An organisation’s investment horizon depends on when and how much money will be needed, and the horizon influences the optimal investment strategy.

Leverage

Any process that compounds a risk. More specifically, it is any process that increases exposure to a source of risk. The use of debt or debt-like instruments to enhance the financial position is the most common form of leverage.

Limited partnerships

A limited partnership limits financial risk to the amount invested. Such limited liability structures can be used to wrap investment products and are commonly used in private equity or by hedge funds.

Liquidity

The ability of an organisation to convert assets into cash in a timely manner without a significant risk of loss. The amount of liquidity needed will vary based upon each organisation's needs and may depend on the asset class.

Mark to market

The adjustment of the value of a security or portfolio to reflect current market values.

Market risk

The part of a security's total risk that is related to movements in the market portfolio and, therefore, cannot be diversified away. Also called systematic risk.

Market timing

The process of changing the asset class weights in a portfolio from time to time.

Mean annualised return (MAR)

The arithmetic average of an annual return over a number of years.

Modern portfolio theory

A theory of investment that tries to maximise return and minimise risk by carefully choosing different assets, explained in more detail in Chapter 1.

Net return

Returns to investors net of fees to advisers or managers.

Operational risk

The risk of losses resulting from inadequate or failed internal processes, people and systems, or from external events.

Performance

Usually interpreted to mean return of an investment or portfolio, but sometimes might also include other measures such as variance (risk).

Performance measurement

The measurement of an investment's performance, in terms of individual assets, advisers/managers or portfolio.

Portfolio

A collection of assets for investment purposes.

Product architect

The person responsible for packaging financial services into marketable investment products, such as mutual funds, annuities, insurance contracts, trust instruments and deposit products.

Relative returns

Returns that are measured against an established benchmark.

Return

The earnings (interest and dividends +/- capital appreciation) resulting from invested capital. In effect, the return of an asset or group of assets for a given period.

Risk tolerance

The willingness to assume additional risk in order to increase the potential return on an investment.

Security selection

The choice of individual securities within asset classes, different from the securities making up the index for the class.

Segregated mandate

A composite of assets that are managed as fiduciary property by the fund management for the account of the underlying investors, which is separated from the assets of the fund management, and therefore constitutes an entity labelled as a segregated asset.

Systematic risk

See market risk.

Total return

The combination of cashflow income received and appreciation or depreciation in the price of the security over a period of time.

Transparency

The full, accurate and timely disclosure of information.

Variance or variation

A mathematical expression that measures the extent to which a series of quarterly returns (in the present context) fluctuates about its average.

Volatility

The size and frequency of movement in the price or value of a security or other investment instrument.

1

The Business Model

“Of the many thousands of managers, the appearance of success for some and failure for others is largely random. Furthermore, predictions of future success for some and failure based on past results are flawed. I hope that in the future, investors will spend more time and effort on an organizations’ investment philosophy, process and people.” *Gary Brinson*

Success in fund management is predicated on getting the business model right – in other words, profitably managing and growing assets on behalf of clients for a fee. The industry does this in various guises, encompassing all forms of collective institutional and discretionary management of assets and, as such, there is no right or wrong model. This chapter, however, explores the commonalities, with a focus on philosophy, process and people.

The business model is clearly attractive to a lot of market participants. At the start of 2010, there were over 15,000 investment companies in the US, which managed over 8,500 mutual funds, 6,000 unit investment trusts, 600 closed-end funds and 200 exchange-traded funds.¹ Europe has had an equal profusion of fund management companies and funds. With so many participants, much of what can be said about the business model is generic. However, getting the mix right can be extremely rewarding.

If institutional managers successfully achieve the right mix, they can enjoy a return on equity in excess of 40%. Margins can vary between 25–35% in bull markets. Maintaining such margins, in what is a highly competitive industry, involves almost perpetual re-engineering. Indeed, this is what the industry has managed. The following pages will illustrate how, as well as ways in which to generate lucrative returns by shaping the business to attract greater assets under management. The scene is set to answer a number of key questions.

-
- ◆ What are the drivers of the industry’s growth?
 - ◆ What is the business model?

- ◆ What is the industry’s strategic direction?
- ◆ How do firms actually make money?
- ◆ What is the added value?
- ◆ How do the economies of scale kick in?
- ◆ How does the organisation function?
- ◆ Who are the clients and what do they want?

The answers to all these questions will illustrate how the fund management business model is evolving, the way returns are generated and the way fees are charged. A number of industry level changes are currently being made in response to the credit crisis of 2007–09. Transparency, independence and liquidity are the new buzzwords. That said, changes also occurred in response to other equally tumultuous events in the past, such as the emerging debt crisis of the 1980s, the October 1987 crash, the Japanese banking crisis of the 1990s, the South-east Asian crisis of 1997 and the Russia/LTCM dislocation of 1998. These experiences bought risk control to the fore.

However, it was the 47% decline in the S&P 500 index from March 24, 2000, to October 9, 2002, and the 55% decline from October 9, 2007, to March 9, 2009, that really shaped the industry and altered the business model. These harsh bear markets repositioned the client mindset from one of relative return to one of absolute return. They gave rise to the hedge fund phenomena, guaranteed products and made the industry more comfortable with the concept of shorting.

Regardless of whether a firm is absolute or relative return-orientated, or whether shorting and hedging are employed, the fund management model essentially focuses on the three “Ps” mentioned above – namely philosophy, process and people. To succeed, it is necessary to get these three right, and any business model must address them head on. At the same time, it is important to balance excellence in investments, distribution, operations and business management.

Not all business models succeed. Those that do are generally based on approaches that attempt to follow best practice, with superior structure, operations and procedures. A bit of background to this is given in the next section.

How the Fund Management Industry Evolved

Professional fund management has existed for a long time. As early as 1600, investors pooled their assets in joint stock companies. The first investment fund as we know it was the First and Colonial Investment Trust. This “close-ended” fund was started in 1868 to give investors of moderate means the same advantages as large capitalists by diminishing risk and spreading investment over a number of stocks. Since then the fund management industry has evolved, changing its *modus operandi* from an art into a science. It is no longer just about diversification but about the creation of optimal portfolios in tax efficient and client-friendly structures.

The industry transformation began in the early 1950s, on the back of academic research conducted by Harry Markowitz (1952), a specialist in linear programming. It was an unlikely grounding for such a large industry. Markowitz’s field was the deployment of mathematical models to maximise output for a given level of cost. Fascinated by investments, it was the adapta-

tion of his research to address optimal portfolio management that essentially began the process of re-engineering the fund management industry. His conclusions effectively moved portfolio managers away from naive stock picking to the world as it is now, dominated by modern portfolio theory.

The key to Markowitz's idea was that a return is the desired output from an investor's portfolio, while the minimised cost is the volatility of that return. This concept, that a properly diversified portfolio will provide a maximum return for a given level of volatility, won him the Nobel Memorial Prize in Economic Sciences in 1990. The award was in recognition of the fact that application of his ideas, in a methodical way, allowed optimal portfolios to be constructed. In effect, the resultant modern portfolio theory provided the theoretical base for the industry.

As modern portfolio theory took off, portfolios began to be constructed optimally and managers began to talk in terms of the trade off between risk and return. It changed the way the industry interacted with its clients. This is because it enabled clients to differentiate between market risk and skill, and thereby better differentiate between managers.

Modern portfolio theory and the technological revolution that followed it gave birth to a whole range of support services. Software run on computers allowed portfolio managers to process a multitude of co-variances and correlations that would have otherwise been too time consuming to undertake. These included, for example, optimisation tools. Using such software allowed portfolio managers to reduce the risk and increase the expected return of their portfolios. Technology also altered concepts of asset allocation between bonds and equities. With the increase in computing power, new techniques and strategies evolved. Initially, it was believed there was just one optimal portfolio, the market portfolio. Indexes were constructed to capture the characteristics of this. It soon dawned on the industry that there are, in fact, multiple optimal portfolios depending on client liabilities. After all, not all clients are tax exempt.

The reason this Executive Report begins with reference to modern portfolio theory is because the resultant relationship between risk and return is the building block of the majority of the best practices, structures, operations and procedures that the industry has. As a result of this, the fund management sector has become one of the most dynamic parts of the global financial services industry. Total assets under management continue to grow structurally, subject to the vagrancies of the stock market indexes.

The Drivers of Growth

Fund managers are often obsessed with assets under management. As a result, it is worth looking at the drivers of growth. In this respect, growth in assets under management can be generated from growth in market size, market penetration or market share.

At a micro level, market share is driven by performance of the underlying funds. At the macro level, in developed countries it is driven currently by these three key factors:

- ◆ clear, long-term, real growth in the underlying asset market;
- ◆ structural changes in the savings rate (demographics of marginal

- propensity to save); and
 - ◆ a capturing of market share from other savings products.
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All three of these drivers ensure that the fund management industry is an attractive medium-term opportunity. The assets that the industry invests in, after all, are valued on the underlying cashflows derived from businesses based in the real economy. These assets become more valuable as the economy grows. In this respect, long-term growth in assets is driven by GDP growth and this, in turn, derives from the relationship between labour-time, capital goods, output and investment.

Capitalism is believed to expand wealth in a process of creative destruction, whereby the cashflows from low-return enterprises are invested in newer, high-return ones. This process results in asset price volatility. It is this volatility that professional fund managers are paid to manage, forecast and diversify away in the search for investment return.

There are various estimates of long-term growth. Consensus tells us that the economy tends to grow at about 2–3% per year in the long run. This is widely considered to be the economy's growth level. Some younger "emerging" economies have higher growth rates and, as such, have faster-growing asset pools that will ultimately require managing. It is these faster-growing economies that offer the best longer-term opportunity for the industry.

One of the variables of growth – labour time – is very sensitive to the birth rate. A birth rate ranging from 10–20 births per 1,000 is considered low, while 40–50 births per 1,000 is considered high. It takes time for them to change. In emerging countries, the birth rate remains high because people are still in agrarian societies and need large numbers of people to work on non-mechanised farms or to provide for parents in old age. In addition, the child mortality rates are high because medicine is not as advanced. These factors all change as countries develop, which, in turn, represents a threat to fund managers in developed countries. In some economies, the birth rate is at critically low levels, with some countries below replacement levels. This creates a "demographic time bomb", which means that the industry will shrink when the resultant dissaving occurs.

Until the dissaving occurs, the "demographic time bomb" faced by many developed economies means that there are not enough assets to provide for the ageing population. This is a major concern for future retirees, particularly if the population structure is already skewed by prior events such as war or emigration. In effect, their pensions are "under-funded". The associated shorter-term phenomena whereby these future retirees save for their retirement is a major boom for the fund management industry.

Market share is less easy to predict. That said, the industry tends to capture market share from other savings products during periods of low interest rates. Fiscal policy also plays its part. Indeed, correctly addressing the market by taking taxation of savings and investment vehicles into account is a major determinant of market share and success.

A more subtle driver, but no less important, is that of innovation. The provision of products to address the needs of clients has led to far greater choice and hence greater utilisation of the industry's resources. Indeed, the greater access to financial products by a growing middle class results in a big shift in

the asset allocation of most savers. This shift is no longer from direct fixed income savings to equity-related products, but has more recently resulted in a shift from traditional long-only exposure to diversified product in single and even multiple asset classes. To satisfy this demand, a whole host of new and innovative products and techniques are being applied to multiple asset classes. Such innovations include liability-driven investment strategies, absolute return strategies, portable alpha and the shorting of stocks and indexes.

Innovation has led to one of the biggest challenges to the industry in many decades, that of leverage. Leverage is the use of various financial instruments or borrowed capital, such as margin, to increase the potential return of an investment. Despite this, the leveraging of many of the new offerings in the decade leading up to the 2008 credit crisis resulted in liquidity issues. This was caused by the industry introducing a liability mismatch into its product offerings (this will be addressed in later chapters). The key driver of the industry, however, is the business model itself. It is the impressive fee generation, and their annual recurrence, that attracts entrants to the business. The fees that assets can generate, in a world with a population of 6.6 billion, worldwide GDP of about US\$48 trillion and stocks and bonds valued at approximately US\$140 trillion globally, are extremely attractive. However, the growth is not without threats. These are addressed next.

The Threats to Growth

There are many threats to growth. One is that competition is coming from new sources; investment banks, for example, are now able to structure solutions for pension funds and insurance companies. This means that they are gaining market share in sectors where traditionally bond and equity portfolios would have done the job. There are a number of other critical threats, including:

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- ◆ destruction of capital (for example, by inappropriate use of leverage);
 - ◆ new savings vehicles from other financial intermediaries;
 - ◆ regulation in response to market developments;
 - ◆ savings turning into spending by retiree generation;
 - ◆ shift into low margin, fixed income management from equities management; and
 - ◆ shift into low margin, passive management from active management.
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Interestingly, most of these threats emanate from within the financial industry. Although the era of financial complexity is not going to go away, the magnitude of the fundamental shift in the industry, as a result of its arrival, should not be underestimated. There was general and profound change in sentiment against financial institutions following the credit crisis, which clearly illustrated that the industry was not really understood by its clients, or even by its own management. That said, the fund management industry has always shrugged off crisis. However, such events do leave their mark and a backlash against financial complexity is definitely a threat that the industry must address.

Reaction to such a crisis, and the subsequent issues regarding regulation, is the threat most talked about by the industry, but least understood by

those outside it. This is because regulations have a cost of implementation. It should not be overlooked, however, that the industry has been shaped by new regulations and their cost is the price that the industry has had to pay for its past indiscretions. These regulations have often developed as a reaction to various scandals where trust has been abused and clients left out of pocket. As a result, the regulations that have been made have tended to be client focused. Senior management should accept that, typically, regulations are not the threat they seem, and indeed lead to an improvement in the way firms are structured, their products constructed and how they conduct their trading and business.

When looking at the threats to growth, it is equally important to understand the changing nature of the rest of the financial world. The pension industry, for example, is in turmoil. Many organisations are underfunded. In both developed and emerging countries there is a strong trend away from defined-benefit corporate pension plans and toward defined-contribution plans. In a similar vein, there is a trend toward individual, employee-managed, defined-contribution retirement accounts that is a boom for the industry. This is happening due to accounting changes, low inflation and the previously mentioned retirement demographics. This has profound implications for the way the industry interacts with one of its biggest clients.

Defined-benefit plans require no investment decisions to be made by the end user, whereas the defined-contribution plans do. Fund managers therefore have to fill the gap by providing an educational response.

The fund manager should treat these threats as opportunities. Although they are often seen as a threat, the profit dynamics should ensure the adjustment process will be fast and efficient.

The Profit Dynamics

The profit dynamics of the fund management industry is not very complicated. It is fee based, variable margin and very scalable. It is scalable because, in theory, it does not require more resources to manage more assets. This makes it a competitive and, hence, attractive industry (Broby 1997). The fee is typically a running fee based on assets under management. That said, increasingly performance fees are being applied by active managers. The latter can be a game changer and will be discussed throughout this Executive Report.

Clearly, fees are central to the business model. These vary considerably across asset types and size of fund. Typically, fees are highest on those assets that are relatively costly to manage, such as emerging market assets, and lowest on cash-based funds. Whatever the asset class, fund managers should always justify their fees in respect of the value they add to product. Clients, meanwhile, should be taught that fees provide the income and incentive to generate the required return. As a rule of thumb, equity funds cost twice as much to manage as fixed income funds, and more than four times as much as money market funds – and fee levels are set accordingly.

Profitability and fees vary dramatically between the retail market and the institutional market. This is because buying power matters and institutions have bigger pools of assets. They therefore command lower fees.

In some jurisdictions or segments, fee pressure is addressed by bundling other products with the fund management offering. In markets such as Ger-

many, these bundled fees include administration and custody. Where this happens, profitability tends to be higher.

Even within the institutional market, fund size matters. Institutional fees tend to be slightly higher on funds that are smaller in size. Where mandates exceed US\$100 million, the fees paid can become very competitive. There is no published fee level, but the following is a guide.

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- ◆ Passive institutional fees range from 3 basis points (indexation) to 15bp (enhanced indexation) per annum, paid quarterly or annually after deduction from the asset value.
 - ◆ Active institutional fees range from 15bp (low tracking error) to 50bp (high tracking error) per annum, paid quarterly or annually after deduction from the asset value.
-

The fee discussion comes into play at two points: the first is the initial screening at the request for proposal (RFP) stage. Once selected, however, the more detailed fee negotiation tends to take place. Those firms with higher information ratios or stronger relationships tend to be able to avoid fee compression at this stage.

In addition to bundling, fees can also be taken at the inception or ending of a relationship. In this respect, in the retail market, fees can have three elements: entry, exit and running fees. In the institutional market, entry and exit fees are rare.

The average expense rate for retail funds, at around 2%, is around twice that of institutional funds. The other thing to note is that there has been a slight decline in fees charged by funds managers in the last decade. This is because there is now more transparency on retail fees. Readers can use the following as a guide.

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- ◆ Passive retail running fees range from 15bp (exchange-traded funds) to 50bp (index fund) per annum, calculated daily after deduction from the asset value.
 - ◆ Active retail running fees range from 50bp (based on a core style) to 150bp (based on a niche style) per annum, paid quarterly after deduction from the asset value.
-

Despite the above, the best way to evaluate a retail funds fee level is by the total expense ratio. This ratio provides investors with a clearer picture of the total annual costs involved in running an investment fund. It consists principally of the manager's annual charge, but also includes the costs for other services paid for by the fund, such as the fees paid to the trustee, custodian, auditors and registrar. Total expense ratios are typically between 1% and 2%. It is likely that large funds have lower total expense ratios, but the principal difference in total expense ratios is whether the fund manager has a higher or lower annual charge.

As can be seen, profitability and fee levels are closely linked. The fee structure makes the industry very scalable. Fund managers that have siz-

able critical mass are able to charge lower fees. According to a survey by McKinsey and Institutional Investor, revenue to assets under management (AUM) average out at about 24bp for “scale players”, as opposed to between 37–41bp for “boutiques” and focused players. The same survey showed that cost to AUM averages out at about 16bp for scale players, as opposed to 25bp for boutiques and focused players. Clearly, if a manager can generate fees in excess of costs it has a profitable business model. The next section will therefore address the cost dynamics.

The Cost Dynamics

As has been shown, operating profits can vary dramatically based not just on the fee level but also on the cost level. If costs rise at a lower level than the total fees, the business becomes more profitable; and, unfortunately, the reverse is also true if costs cannot be contained. The key costs include:

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- ◆ advertising;
 - ◆ compliance;
 - ◆ legal and accounting costs;
 - ◆ marketing and distribution;
 - ◆ office space (often in high-value financial centres);
 - ◆ real-time data systems;
 - ◆ remuneration (with bonuses linked to performance); and
 - ◆ technology.
-

The 2009 cost survey by SimCorp Strategy Lab “Global Investment Management”, showed that 43% of fund managers had been through cost-cutting projects as a result of the credit crisis. Of those, 55% had been targeting labour costs. Of all businesses surveyed, on average only 41% have been able to sustain the achieved cost reductions for more than a 12-month period. Interestingly, 73% used no structured cost-reduction methodology.

According to the results of the survey, top performing fund managers, with cost rates below 85%, regularly review their cost structure every six months.² The larger the firm is the more it is able to bring its costs down. In this respect, passive managers have the greatest challenge. Without scale, they cannot charge a competitive fee, as the fee acts as a drag on their tracking error. With such a drag on their performance against an index, they cannot win business.

The biggest component of the cost equation is the variable side, with salary being the largest. This is particularly the case for active fund managers. Passive management tends to cost less. The compensation component can be broken down into salary and bonus. Back-office costs tend to be generally predictable with capped bonuses.

It is possible to cut costs but there are trade-offs that have to be made. Casey Quirk modelled such tradeoffs between reductions in incentive compensation and reductions in headcount. Its analysis showed that, if done poorly and headcount and incentive spend remained flat, then operating profit margins would decline by over five percentage points (Quirk 2008). This clearly shows why it is so important to get the right mix.

The other way to cut costs is to outsource. It is difficult to outsource

the front office, apart from perhaps some raw number crunching. Risk and middle office can be outsourced, as can back offices. The downside to this is having to accept a lack of customisation and control.

Distribution costs are also difficult to cut. Indeed, they are core to the asset-gathering process. Such costs vary by channel, compensation and maturity of markets. Distribution done in-house costs more than that done through a third party. That said, the fee has to be shared.

Costs can vary not only due to scale but also due to the scale of resources needed to source the investment return. As can be seen in Table 1.1, the high-cost base of the UK relative to the rest of Europe means that its operating profits are substantially below that of a low-cost country like Spain. This is because both salaries and rental levels are lower in Spain than in the UK. However, the overall pool of money to manage is also less in Spain.

Table 1.1 European asset management financial metrics in basis points of AUM

Source: McKinsey (2000)

	Operating profits	Net revenues	Total costs
Benelux	19	32	13
France	19	32	13
Germany	9	23	14
Spain	42	53	11
Italy	35	48	13
UK	11	28	17

Costs, like fees, are expressed as a percentage of funds under management. Where cost structures are comparable, the fixed structure of the industry's costs clearly benefit from higher revenues driven by rising assets under management. In general, whatever the model, costs tend to vary comparatively little in practice. This is due to human nature. As a firm attracts more funds under management, teams tend to recruit more portfolio managers and analysts, although in theory this is not necessary unless the mandates are dissimilar.

The best example of cost dynamics is provided by Barclays Global Investors (BGI), the leading provider of passive investment management products and services. As of June 30, 2009, BGI had more than 2,900 institutional clients and US\$1.7 trillion of assets under management. The company transformed the investment industry by creating the first index strategy in 1971 and the first quantitative active strategy in 1979. It is the global product leader in exchange-traded funds (iShares) with over 380 funds globally across equities, fixed income and commodities, which trade on 16 exchanges worldwide. The size of BGI makes them the most productive passive manager and therefore the lowest cost producer. It is able to manage passive funds, and cover costs on fees as low as 3bp. Although this is very low, the company can supplement its revenue by stock-lending fees. In other words, its size makes it highly productive.

The Productivity Dynamics

Another way to look at the business model is in terms of productivity. That is, in terms of the success of the investment process as well as costs per asset under management. This is because the profitability of the investment process is as much a function of returns as it is of costs. The productivity of a fund manager is therefore a function of:

- ◆ the investment performance versus peers and benchmark;
- ◆ the number of funds managed by one individual or team;
- ◆ sales per employee;
- ◆ the nature of inflow and outflow of AUM;
- ◆ the systems and support provided to the front office; and
- ◆ innovation.

The two main drivers of the above are net sales/redemptions and market returns. Often, the latter can far exceed the former. Fund managers, however, should never budget for market returns and, indeed, should make internal provision for market declines in order to be prudent. This is because they are unpredictable, even for the best managed funds. Sales and redemptions can be budgeted for. This is often done by a probabilistic estimate of the “pitch book” of the sales force.

Annual fund management sales per employee average about US\$8.64 million for scale players, as opposed to US\$2.33–5.50 million for boutiques and focused players. For struggling firms, this metric averages out at US\$2.33 million. Clearly, productivity varies between firms and some firms in decline can see net redemptions. Indeed, underperforming strategies can see rapid client loss, so client retention will be covered later in this Executive Report.

The reason that the variance in productivity is so large is mostly down to the cost structure. As the previous section showed, there are no definitive costs or revenue metrics. The average expenses and profit as a percentage of revenues are shown in Table 1.2. The industry effectively takes a fee for the stewardship and prudent management of its clients’ assets against predetermined benchmarks.

Table 1.2 Average expenses and profit as percentage of revenue

Operating profits	20–35%
Incentive compensation	5–20%
Salaries (mainly portfolio managers)	15–20%
Other operating expenses	20–25%

Productivity, be it investment return or how the company is structured, is impacted by rapid innovation. This in turn is a function of the high level of competition within the industry. Products designed to utilise one set of skills or exploit inefficiency have to be constantly changed as the value proposition changes. Effectively, a firm’s product’s competitive advantage erodes over time through competition, and eventually they can become a commoditised form of risk premium capture.

Fund management business models continue to evolve and as such profitability is not very predictable. The natural response to the unpredictability

of the markets has resulted in product proliferation and far more products in the marketplace than is either necessary or desirable. The net result is an inexorable downward pressure on fees.

Overcoming the Downward Pressure on Fees

There is much talk about pressure on fees by the press and investment consultants. Clients realise that any fee is at the expense of the return that they receive on their assets. Fund managers typically wish to resist downward pressure on their fees. In this respect, it is important to understand where fee pressure comes from. In essence, it is a function of:

- ◆ performance track record;
- ◆ competitors trying to under bid an existing manager;
- ◆ competition from passive funds;
- ◆ competition from scale players; and
- ◆ poor market information of fee levels.

While it is true that clients always demand a better deal, it should be pointed out that some fees can rise. This was the case in 2009, as can be seen in Table 1.3.

Table 1.3 Fee change in US fund management mandates 2008/09

Source: Morningstar

Category	Change in fees	Fees July 30, 2009	Fees July 30, 2008
US diversified	+.06	1.37%	1.31%
Domestic equity	+.05	1.39%	1.34%
International equity	+.08	1.56%	1.48%
Taxable bond	+.01	1.04%	1.03%
Municipal bond	+.01	1.03%	1.02%
Asset allocation	-.03	1.30%	1.33%

Fee rises, however, are the exception, not the norm. The barriers to entry are theoretically very low. The principal barrier of entry is capital, and that can be said to be a commodity. However, capital alone is not sufficient to succeed – fund managers have to differentiate themselves, and also deliver on their product objectives in order to preserve their fees and indeed their mandates.

Despite the concerns, the evidence does suggest that fee pressure is prevalent. The average cost of investing in mutual funds has decreased. Rea and Reid (1998) for example only measured a drop of 76 basis points, from

225bp to 149bp, in the average annual charge of equity mutual funds from 1980 to 1997. They found that the bulk of the decline was due to a decrease in the importance of front-loaded funds – funds that charge an initial fee when making a deposit in addition to annual charges. This is a one-off.

The development and growth of index funds also impact the mix of fees and hence the overall fee level. This is because index funds charge investors considerably less on average than actively managed funds while achieving similar gross rates of return. This trend is ongoing.

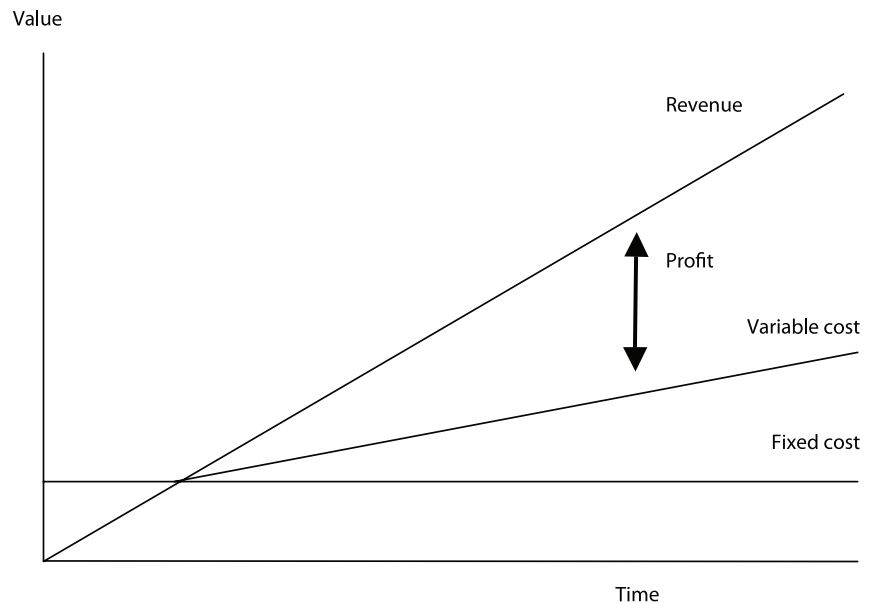
One way to combat fee pressure is to have multiple product offerings. This allows a fund management firm to always have a top-performing asset class or strategy. One manager that employs this approach is AXA Investment Managers, which offers what it terms a multi-expert business model. It believes it does not have to be singularly focused on just one business model. In this way, they have developed a competitive advantage through high quality research capabilities across different investment strategies. To achieve this competitive advantage it has made significant investments in fundamental research resources across its research areas, particularly those dedicated to active quantitative equity, fixed income and what it calls judgemental equity. This last offering carries a far higher margin than traditional products.

The reason that structure, operations and best practice are important to such companies is that avoiding fee pressure comes down to risk and return. Fund managers have direct control only over cost. The business model is clearly attractive, but at the end of the day the firm must have a value proposition to succeed and take advantage of the economies of scale and overcome downward pressure on fees.

Taking Advantage of The Economies of Scale

The economies of scale in the fund management industry are immense. Despite the high proportion of variable costs, fund management is potentially very scalable. This is because most variable costs are linked to asset growth and fixed costs need not grow faster than assets. In this way asset growth should reduce the ratio of fund expenses to average net assets over time.

Figure 1.1 Economies of scale

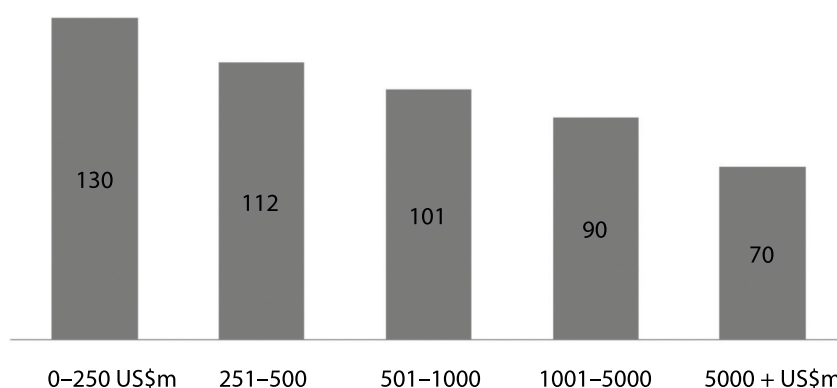


The neoclassical theory of the firm portrays the marginal cost curve and the average cost curve as J- or U-shaped. Figure 1.1 simplifies this in order to illustrate how profit increases faster than revenue. It shows that firms make a loss if they do not cover fixed costs. The variable costs in this instance kick in after the break-even point; as revenue rises, and variable costs rise at a slower pace, profitability expands.

Figure 1.1 illustrates the economies of scale from the total cost perspective. It shows average operating expenses as a percentage of revenue expressed in basis points, grouped into buckets of assets under management. Average operating expenses are essentially the variable costs plus the fixed costs as show in Figure 1.2. The economies of scale can be seen clearly, with the largest firms having almost half the average operating expenses than the smaller ones.

What these two figures do not illustrate is that the scalability of the business depends on the type of product being offered. In this respect, operational efficiencies associated with fund size should always be viewed within the context of whether the investment approach is more passive or active. Passive funds are very scalable, particularly if they are using a liquid national benchmark. A low operating expense ratio might be due, for example, to a high concentration of low-expense index funds, institutional funds or large-cap funds. In other words, the business “mix” matters. Figure 1.1 illustrates why average operating expenses decline as firm size increases. This is clearly shown in Figure 1.2.

Figure 1.2 Average operating expenses (bp)



It is difficult to show how investment approach impacts investments in either Figures 1.1 or 1.2. There have been few studies of the average operating expenses in the fund management industry. One conducted by the SEC does however shed some light. It found that a number of items influence fund expenses,³ observing that:

- ◆ as fund assets increase, a class’s operating expense ratio decreases;
- ◆ as fund family assets increase, a class’s operating expense ratio decreases;
- ◆ as portfolio turnover increases, a fund’s operating expense ratio increases;
- ◆ as the number of funds in a fund family increases, a class’s operating

- expense ratio decreases;
- ◆ as the number of portfolio holdings increases, a fund's operating expense ratio increases;
- ◆ equity funds have higher operating expense ratios than bond funds, specialty funds have higher operating expense ratios than equity funds and international funds have higher operating expense ratios than comparable domestic funds;
- ◆ index funds have lower operating expense ratios than other funds;
- ◆ institutional funds and classes have lower operating expense ratios than other funds and classes;
- ◆ multi-class funds have higher operating expenses than single-class funds; and
- ◆ older funds have higher operating expenses than younger funds.

Clearly, there are a number of factors at work. Another, often overlooked, factor is the complexity and legal wrap of the funds. In other words, whether the fund manager has a suite of managed, retail or institutional funds.

Fund Size and Profitability

The minimum size for a separately wrapped fund, be it unit trust, mutual fund or segregated portfolio company, is considered to be variously between US\$15 million and US\$30 million. Smaller funds are not economically viable and the impact on the total expense ratio is unfair to clients. Even at these levels, the fund size is unlikely to generate sufficient revenue to cover costs; realistically, the minimum size for a fund should be between US\$80–150 million.

It is all very well saying that a fund should be a minimum size but the maximum fund size also has to be considered. It is all very well saying fund management is a scale game but if the strategy is, for example, investing in smaller capitalisation companies – there is a natural limit to any strategy.

When it comes to fund size, the economies of scale work in favour of asset classes with high underlying growth rates. Where a firm's strategy has a high beta, such as an equity growth style, or employ leverage, the change in AUM may well be higher than a low beta or passive fund, or a low return asset class like fixed income. This is because, over time, they can have a structurally higher real rate of return on the assets themselves.

Fund Charges and Scalability

Fund management scalability should also be looked at in the context of what is charged to the assets and what is charged by the manager as a fee. Fund expenses for advisory and administrative services make up the largest share of operating expenses, accounting for 70% of the total, the balance being items such as technology and operations. These services are usually undertaken by third parties and, as such, the fee can be charged separately or bundled as part of the legal structure of the fund, as is the case in mutual funds.

Figure 1.3 shows the breakdown between investment management, administration, sales and technology. As can be seen, all are equally scalable. Once again, it is clear that the larger firms have the advantage.

Typically, the more skillful the manager, the higher the fees that can be charged. Unfortunately, this is where the limits to economies of scale begin,

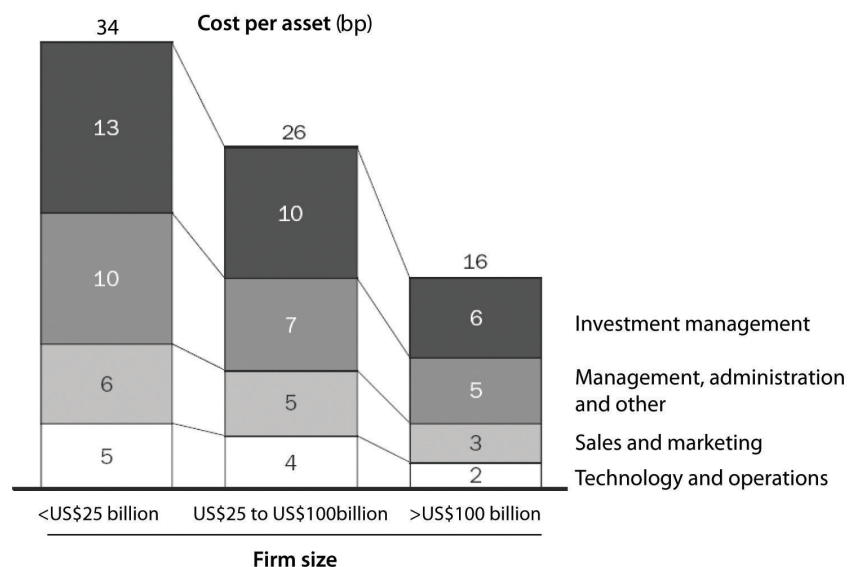
as there are diseconomies of scale as far as performance is concerned. As a result, investment strategies generally have to be capped at a certain size or performance will be adversely affected.

Mergers and acquisitions are perhaps the fastest way to obtain economies of scale. An illustration of this can be seen from the acquisition strategy of ABN AMRO Asset Management, which was focused on efficiency metrics. As early as 2001, it merged the operations of its Chicago-based ABN AMRO Asset Management (US) unit into Chicago Capital Management, the latter acquired as part of Alleghany Asset Management, also of Chicago. The result was an US\$18 billion merger. By 2006, ABN AMRO Asset Management had global assets under management of US\$205 billion, pursuing the same strategy of acquisition and organic growth. Its largest challenge then became the fact that it operated in 22 countries, in many different time zones. However, it turned this to its advantage by leveraging its core position in Europe, to expand first in the US and then into Asia. Utilising this approach saw its efficiency ratio on its core activities decrease from 79.9% to 68.7% in just three years.

One thing that mergers and acquisitions fail to do in the fund management industry is deliver added value to the clients. Indeed, often managers are put on “watch” or funds redeemed when this happens. This is because uncertainty and management time used on integration can hurt investment performance.

Figure 1.3 Economies of scale

Source: McKinsey/Institutional Investor’s US Institute 2004 US Asset Management Benchmarking Survey



Delivering Added Value to Clients

The biggest differentiation factor between fund managers is their investment proposition, their added value. It is important to understand that this is a professional industry dominated by sophisticated financial institutions, all of which claim to add value. Success therefore depends on a similar degree of professionalism and sophistication, and added value can, to some extent, come from product differentiation. The three key areas where the firm can make a difference are:

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- ◆ enhanced performance;
 - ◆ superior client service; and
 - ◆ unique product.
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Delivering investment performance can be done in either an active or passive way, and financial institutions tend to specialise in one or the other. That said, the distinction between these has tended to become blurred. Each is scientifically based in modern portfolio theory but differentiated by what the proponents think about market efficiency.

One of the biggest parts of the added value, in a highly competitive industry, comes in the form of product and its delivery. In this respect, the fund management value chain consists of the “factory” or front office, middle, back office and marketing/distribution. The location of the front-office function is primarily driven by the availability of qualified labour, the performance and liquidity of capital markets and the quality of the financial infrastructure. The middle- and back-office functions, as has been said, are a function of cost.

The Future

There are two views of how the value added will evolve from the industry’s perspective. The first, proposed by Ellis (1992), is that the industry will evolve into large multi-product fund managers that will dominate the smaller players. In such a scenario, relationship management and development will be paramount. The second view is that the industry will fragment into smaller, more specialised, firms that are more client-centric and better able to service clients. In the author’s view, the most likely evolution will be a combination of both. This is because the key to delivering added value is a combination of:

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- ◆ delivering portfolios in a cost effective way;
 - ◆ delivering portfolios that have better risk–return characteristics than one constructed naively;
 - ◆ helping clients meet their return objectives; and
 - ◆ undertaking the administrative burden for clients.
-

In respect to the above metrics, clearly proximity to clients is an important consideration, and hence the reason why small firms have as much a place in the future as large ones. However, the investment factory need not be located in the same place as the distributor or client servicing. Whatever the future holds, all businesses are and will be driven by the client and the added value they perceive they receive. In this respect, the fund management industry’s clients, divided along the lines of retail and institutional, must achieve their return goals. This has implications for the type of investment offering that the firm builds, and indeed the nature of its product offering. This will be expanded upon later in this Executive Report.

The most important value added in either the present or the future is the creation of investment performance for clients. This is distinct from the sell-

ing of investment performance to prospective clients. In order to communicate this added value, fund managers are responsible for creating and delivering consistently transparent results. Obviously, this includes fair dealing in applying best execution and suitability, as well as a host of other factors. The main thing to remember is that it is a “numbers” business. That said, fund managers need a framework in which to make the numbers – they need a structured decision-making process.

Implementing Structured Decision-Making

The establishment of a structured decision-making process is central to achieving the end result, namely robust and well-constructed portfolios. Without this there can be no repeatable and definable investment performance, and hence no long-term success. This observation has been confirmed by many studies on the characteristics of successful fund managers. The main conclusions of these studies can be summed up by five attributes necessary for such success:

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- ◆ a clearly stated and acted-upon sell discipline to realise gains from successful investments;
 - ◆ a stated investment philosophy that can be applied consistently, and used as a means of identifying an appropriate investment strategy;
 - ◆ an investment process that is based on this philosophy;
 - ◆ continuity of key personnel, or a record of how the business operates, establishing institutional memory; and the existence of an easily defined, structured decision-making process.
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What these studies show is that all the good numbers in the world are not really good unless a firm maintains adequate systems and is compliant with the appropriate ethical, regulatory and professional standards. These systems and this approach should be complimented with focused and dedicated management of the top end of the firm as well as the investment process.

Having the Right Mindset

In fund management, the dollar value of assets can be enormous, so having the right mindset is critical. As a result, the need for a structured process is evident, not least when several people or interests are involved in the process. In order to safeguard and indeed grow the dollar value of these assets, it is crucial for the process to be:

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- ◆ agnostic in its focus on what will be implemented;
 - ◆ complete, with specific investment rules, processes and information;
 - ◆ consistent with both itself and the enterprise requirements;
 - ◆ traceable, in as much as the investment processes should be traceable back to investment goals; and
 - ◆ unambiguous, with all internal procedures being easy to understand.
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In adopting these guidelines for structured decision-making, the investment process will clearly show how the firm creates investment performance.

This is because they help the investment team to define how to achieve a portfolio within a given investment style. Combined with clear communication, structured decision-making will allow clients to better assess the manager and gauge where they stand in respect of risk preferences and selection. By emphasising sequence, such an approach provides for an orderly way in which alpha can be duplicated in future.

Implementing the mindset of a structured decision-making process is important. It provides a framework for investors to see the firm's competitive advantage, its investment strategies and philosophies. If the firm gets this right, the economies of scale will follow. The firm will then be free to concentrate on developing strong distribution capabilities.

Developing Strong Distribution Capabilities

In order to be successful in fund management there has to be access to clients. This means having a good distribution model. Distribution is essentially “selling” a fund manager's services, or more specifically its investment performance, to clients. In this respect, the main function of distribution is to communicate effectively in order to either win new business or maintain existing relationships. The term “distribution” is very broad and is generally taken to cover the following areas:

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- ◆ dedicated departments to service clients and potential clients;
 - ◆ direct marketing to prospects;
 - ◆ in-house sales through product specialists;
 - ◆ product development to meet client demands;
 - ◆ providing data to consultants and product evaluators; and
 - ◆ sales agreements with third parties.
-

As this list shows, distribution comes in various guises. In the US, for example, 401k plans and other sponsored employee retirement plans are an important distribution channel. Such plans and retail distribution are very different from distribution to institutions. The latter is often done by in-house marketing professionals. Sponsored plans and retail distribution, on the other hand, is more likely to be “channel” based.

It is often thought that distribution to institutional clients is more demanding than retail distribution. This is because institutional clients are believed to undertake greater due diligence. Retail channels, however, also have quite rigorous due diligence. Take Morningstar, for example, the mutual fund analytical service. Under its methodology, the top 10% of funds receive a five-star rating. Research has shown that retail investors prefer these funds to others. Although these investors are not undertaking their own due diligence, an equal amount of analysis is taking place. It has, however, been outsourced.

Distribution channels are important to establish and nurture, as once created they provide a fairly steady source of assets. The product may change, for example to guaranteed funds in a bear market, but there is generally some kind of savings demand. That said, severe market corrections do tend to see large net outflows from open-ended investment funds, but, on balance,

there is always something for the channels to distribute.

In Europe, it is typical for a marketing agent to receive up to 100% of the subscription fees and between 20–50% of the management fees as a distribution fee. In the US, directly marketed funds often have no loads and do not have distribution and marketing fees (termed 12b-1 fees). Whatever the fee structure, however, all fund managers should ensure the products are appropriate for the client and in their best interest.

Ensuring Distribution in the Clients Interest

As in all aspects of the business, the client comes first. Distribution agents should observe a number of best practices to ensure this happens, such as:

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- ◆ acting with honesty, dignity and integrity when recommending funds;
 - ◆ dealing in a fair and equitable manner, and avoiding aggressive and offensive sale practices or suggesting returns are guaranteed;
 - ◆ giving any advice in good faith, understanding the client and acting with the best of intentions; and
 - ◆ treating investors with respect and fully disclosing all information on the product and on what basis investment decisions should be or are made.
-

The above guidelines were initially made with the retail investor in mind. Sometimes, however, institutions also require impartial advice. In order to receive this, institutional clients often use investment consultants as distribution gateways. Institutional clients have investment goals and self- or externally imposed restrictions. They allocate funds across asset classes in an attempt to achieve their goals. Within each asset class, mandated amounts are then delegated to fund management firms to be invested in a particular investment style.

As the fund management industry is global in nature, and with the investor base being complex and fragmented, there are clear efficiencies and scale in distribution channels. That said, there are limits to economies of scale in established distribution channels as clients are all, to some extent, local in flavour. There is still, however, room for new distribution channels.

New Distribution Channels: The Evolution of Open Architecture

The distribution model continues to evolve and the fastest-growing aspect is “open architecture.” At present, retail clients still tend to use financial advisors or banks as their primary distribution channel. However, retail clients increasingly expect their distribution channels to offer a wide range of investment products from different providers. This has meant that the tied distributor model, where the products of only one firm are sold, is in decline.

Open architecture, where distributors sell best-of-breed rather than in-house funds, is seen as an increasingly attractive business model. The trend is very easy to observe. In Europe, for example, the share of non-proprietary distribution channels rose from 16% to 20% between 2004 and 2006.

The changing landscape of the way in which investors source products is revolutionising the distribution architecture. As always, changing distribu-

tion patterns create new opportunities for attracting business through external providers. The most recent additions include online banks and brokers, independent consultants and banks and savings institutions that are diversifying their product offering.

There is little data on how funds are directly distributed compared with those that are marketed through some type of distribution system. In continental Europe, the banking sector is still the dominant distribution partner. That said, the pace of change is very fast, particularly in the light of the changes to the banking industry since the credit crisis. In the UK, where independent financial advisors (IFAs) and investment consultants dominate, the pace of change is slower. In the US, there are some 20,000 registered investment advisors who all sell mutual funds in institutions such as insurance companies and brokerage firms. External wholesaling has been the primary distribution model. As a result, investment decisions are data driven, not relationship driven. Banking mergers are offering many new avenues for entrants into the distribution channels. Managed accounts that undertake integrated asset management for high-net-worth individuals (HNWIs) are also growing in importance.

The increased focus by fund managers on using intermediaries for distribution means the sales of funds through established dedicated distribution channels is likely to decline. At the same time, the introduction of so-called open architecture will change the mix.

Fund of Funds

The fund of funds industry is similar to open architecture. It is increasingly becoming an important part of a fund manager's distribution dynamics. The largest fund of funds are those with more than US\$1 billion in assets under management. Collectively, according to a survey carried out by Invest Hedge in 2009, these funds had total assets under management of US\$613 billion.

The changing distribution pattern is aided by a greater acceptance of fund of funds in the light of the risks associated with individual firms. Fund of funds allow individuals to invest in financially complex products that suit their own risk–return parameters and have professional due diligence. This is part of the overall change from product-driven to client-driven solutions.

The Internet is also commoditising distribution and changing the way fund of funds are able to penetrate the market. Investors who do not need advice are increasingly buying investment products on online platforms, and diversification is therefore something they are prepared to pay for. This fledgling side of distribution may well increase in importance and become a central means of building the business.

Building the Business

Regardless of the distribution model, building the business is a dynamic process that should continually evolve. There are a number of standard metrics to ensure that the firm has a base from which to build. These include:

- ◆ being at the cutting edge of financial developments;
- ◆ being open-minded to new products and investment approaches;
- ◆ being prepared for new opportunities;

- ◆ communicating investment performance and the firms' unique selling points;
- ◆ ensuring teamwork;
- ◆ looking after existing clients;
- ◆ organising effectively;
- ◆ promoting the brand; and
- ◆ thinking laterally.

All the above are important, but one of the biggest challenges to building the business is forecasting and knowing where to position the firm for the future. Fortunately, the fund management industry has long demographic trends to aid this process. Management should plan for segments that are suited to their service, and determine which products and services the firm will offer to reflect such trends.

One way to plan for the future is for fund management firms to hold a half-yearly strategy meeting off-site with the heads of each department. Such meetings help align everyone to the same goals. It avoids, for example, product development that is not part of the firm's matrix, taking on unprofitable clients or failing to ensure technology and operations are adequate to support the mission of the firm. They are also good for team building.

In building a business team based on "people", the question of "what's in it for me?" has to be addressed. In this respect, one of the most important microstructure issues to resolve is ownership. It is not just financially savvy portfolio managers who desire a share of ownership; clients also like to see some form of ownership in fund managers. Indeed, with mutual funds they expect to see an alignment of interests by manager participation in the underlying investment funds. Such personal alignment is an important prerequisite to building the business. Indeed, fund managers in the US are required to disclose how much of their personal wealth is invested in the funds they manage.⁴

Professionals involved in managing assets know the value of equity and are motivated by their participation in it. If they do not share in the ownership, there is always the possibility that they can start up their own venture.

Starting Up a New Fund Management Venture

As a dynamic industry peopled by investment-focused professionals, there are always new fund management companies being formed. The barriers to entry are not as daunting as might be expected thanks to a growing service industry to assist such ventures.

There are a number of "threshold conditions" that need to be met for any new venture. Also, clearly, fund management is a regulated activity and application must be made to establish the entity with the appropriate approvals. That said, a budget of US\$1 million should ensure that these threshold conditions are adequately provided for.

Aside from the starting capital, a new firm needs assets. It is possible to obtain seed funding or a seed client, dependent on past performance of the individuals concerned. Such seed capital will expect a new firm to address three critical factors:

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- ◆ team size;
 - ◆ investment professionals; and
 - ◆ cost structure.
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There are a number of established companies that provide seed capital for new start-ups. These typically seed the first fund and take either an equity stake or a share of future revenue. Typically, such a share can range from 20–30%.

In addition to the seed capital, the most important issue for any start up is to ensure adequate resources. This is subjective. The regulator will require the new manager to have sufficient and appropriate resources to manage the assets. This includes capital, financial stability, expertise, risk management and third-party arrangements, as well as office infrastructure and relevant systems. A consideration, both at authorisation and thereafter, will be high-level controls. These are the measures taken by the firm to manage the business and mitigate regulatory and operational risk.

The regulator will be keen to check if the start-ups owners, controllers and senior management are deemed fit and proper for the job ahead. To do this, an assessment of the principal individuals is carried out to check for adverse regulatory or financial history, criminal records, business failings or previous career problems. The regulator will consider whether the individuals conducting the regulated activity can apply the appropriate expertise.

Conclusion

This chapter examined the fund management industry within the context of modern portfolio theory. It highlighted the impressive scale economies involved in managing financial assets, particularly for closely indexed funds. Although these scale economies have driven consolidation in the industry, new entrants abound. This is because the fund management industry continues to evolve to serve the needs of the institutional investor. After all, investment markets also evolve.

It was shown that the business model should be focused on people, process and philosophy. The first rule of fund management is that these should all be aligned or else managers very quickly discover that their added value erodes over time due to competition, and their investment proposition eventually becomes a commoditised form of risk premium capture.

Due to the ever-present evolution, the business model is endorsing research-intensive, non-core asset classes, and as a result specialisation has become pronounced among active fund managers.

The business model is robust and the industry dynamic, and this chapter clearly showed that the business model continues to evolve. The introduction of financial complexity and the framing of the investment proposition in terms of risk and return continues to reshape the industry. Indeed, the industry has recently had to come to terms with how absolute return investment fits into its traditionally long only and relative return focused history.

It was also shown how scalable the revenues are during the good times. This is because there is always an element of market return in any fund manager's performance. The industries future growth, however, is firmly tied to demographics and savings patterns. By 2025 over a quarter of the

populations of the US, UK, Germany, Spain, Italy, Switzerland and Japan will be in retirement. For the fund management industry, this presents a scenario where product will have to adapt. It also presents a scenario where opportunity abounds in new and emerging markets.

At the end of the day, delivery of strong and consistent investment performance is, as always, the key to a good business model. To achieve this, the fund manager needs organisational structures that attract and retain top investment professionals. The following chapters will show how this can be achieved in an industry context.

Notes

1. Extrapolation from figures taken from Investment Company Institute Fact Book (2006).
2. Falkenberg, Lars, SimCorp StrategyLab and Professor Michael Pinedo, Stern School of Business, NYU.
3. SECV Report of the Division of Investment Management on Mutual Fund Fees and Expenses, 2000, December.
4. SEC Rule S7-12-04, Disclosure Regarding Portfolio Managers of Registered Management Investment Companies.

2

The Industry

“The institutional asset management industry after the financial crisis of 2007–09 is likely to return to the role of one of the largest and most dynamic parts of the global financial services sector in the years ahead. But what shape it may take is a matter of considerable uncertainty.” *Professor Ingo Walter*

The fund management industry, described by Professor Walter as one of the most dynamic parts of the global financial services sector, constructs and maintains investment portfolios on behalf of its customers, both individual and institutional. The management of these portfolios can be performed either in-house or delegated externally to firms structured along the lines detailed in this report. This chapter investigates the industry from the top down, and illustrates some of the main trends.

The size of the fund management industry is a function of the size of global asset pools, which are measured in trillions of US dollars. The plain vanilla assets under management of the global fund management industry were estimated at US\$61.6 trillion at the start of 2009.¹ It is often also looked at in terms of the percentage of GDP that is controlled by institutions. This can vary between 50% and 120% of GDP. As a result of this vast pool of money, fund management attracts a large number of participants. Indeed, the largest fund management firm represents less than 2% of the industry, and the majority of firms are just a fraction of that.

Although the fund management industry can range from a small US\$20m AUM start up to a US\$200 billion AUM incumbent, there are distinct commonalities. The most important of these lie in the way the funds are managed.

Regardless of whether fund managers use modern portfolio theory to construct optimal mean variant portfolios, the tools and techniques that have evolved have now become the norm. Indeed, the widespread adoption of academic methods has moved the portfolio construction process from an art into a science. This is because finance theory teaches us that there is a mathematical relationship between risk and return. This relationship allows

fund managers to use statistical techniques to ensure portfolios are on the so-called “efficient frontier”. In other words, constructing portfolios that are superior to those constructed using simple diversification rules.

Despite the commonalities, product innovation is rife. The differing ways fund managers construct portfolios is, after all, how they differentiate themselves. Indeed, the large number of fund management firms furiously competing with each other will ensure that this continues to be the case.

All this rivalry means the industry is close to the economic concept of “perfect competition”. It has both regular new entrants as well as firms exiting the business, and the industry attracts competitors from a broad range of strategic groups. The independent providers compete with both commercial and universal banks, as well as a myriad of investment banks, trust companies, insurance companies and private banks. In addition, there are numerous captive in-house managers, mutual fund companies, investment trusts and various types of specialist firms. Being close to perfect competition means that most participants are price takers and no firm really influences the price of fund management other than through scale economies.

The US\$61.6 trillion size of the industry mentioned at the start of this chapter is a notoriously difficult number to estimate. Table 2.1 details how the estimate was compiled. As can be seen, pension assets account for the largest proportion of funds managed, namely US\$24 trillion. Some US\$15.2 trillion of this is located in the US. There are around US\$18.9 trillion invested in mutual funds, perhaps a more reliable number than the others due to better data collection in that sector. The table shows estimates that there are US\$18.7 trillion in insurance funds, although this number is fairly subjective.

If we included the other opaque pools of assets, such as sovereign wealth funds, hedge funds, private equity funds and exchange-traded funds, the assets of the global fund management industry totalled around US\$60 trillion at the beginning of 2009. Of this, the US was the biggest manager, accounting for over US\$30 trillion. The UK, with a 9% market share, was the second largest with assets under management of some £3.7 trillion. Switzerland, with a 1% market share, is also notable as the leading European centre of private wealth management.

Table 2.1 Fund management asset pools

Source: IFSL estimates based on Watson Wyatt, OECD, Insurance Information Institute, Investment Company Institute, SwissRe, CEA data.

	Pension funds*	Insurance assets	Mutual funds	Total conventional	% share
US	15,255	6,120	9,601	30,976	50
UK	2,658	2,576	505	5,739	9
Japan	787	2,555	575	3,917	6
France	144	2,007	1,591	3,742	6
Germany	109	1,692	238	2,039	3
The Netherlands	810	444	77	1,331	2

Switzerland	404	356	135	895	1
Other	3,833	2,960	6,195	12,988	21
Total	24,000	18,709	18,917	61,626	100

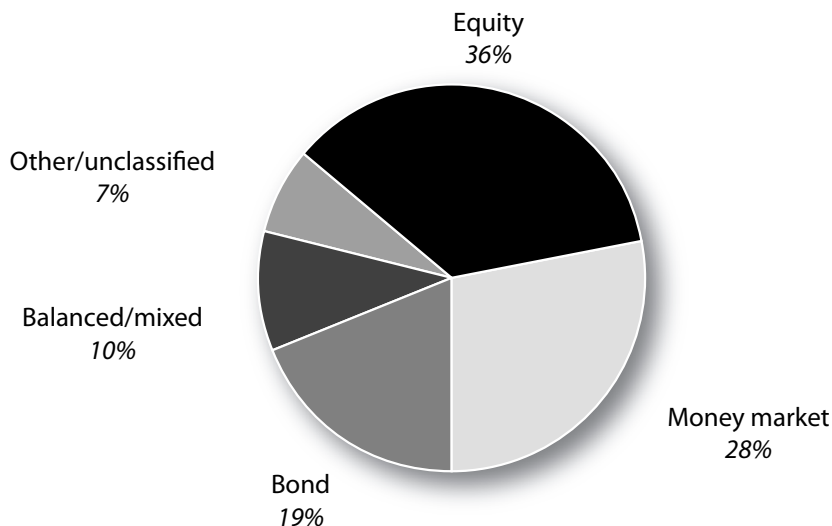
All figures are in US\$ billion (end 2008). Figures are for domestically sourced funds regardless of where they are managed. No reliable comparisons are available for total funds under management by country.

* IFSL estimates based on OECD and Watson Wyatt data.

With such a large pool of assets there is, not surprisingly, a vast profusion of fund managers. In the US alone there are over 25,000 fund managers. Of these, some 6,000 have AUM in excess of US\$25 million. The largest players manage tens, if not hundreds, of billions of US dollars. Likewise, with such a depth of market, the type of fund varies enormously. In Germany, for example, much of the US\$2 trillion of assets are fixed income funds managed from Frankfurt. That said, equity is the dominant asset class. The exact breakdown of the type of assets managed can be estimated by reference to mutual fund data. The breakdown of assets in mutual funds (estimated at US\$18.9 trillion in Table 2.1) is as shown in Figure 2.1.

Figure 2.1 Types of mutual fund

Source: Investment Company Institute



As can be seen, equity fund management is the most important segment, representing 36% of all mutual funds. This is not surprising, as it is also the most profitable asset class for the fund managers themselves. The next most important segment, money management, is the least profitable – the reason why this report will not focus much on this segment. Although there is US\$5.2 trillion in money market funds, such products are more of a savings than an investment product because they are essentially cash proxies, invested in certificates of deposit, very short duration fixed income, currency or cash equivalents.

Clearly, the figures for AUM change stated in this section are changing rapidly. The big picture, therefore, is best understood by looking at the recent evolution in the industry.

Recent Evolution

The fund management industry entered a period of rapid growth in the mid 1980s, stimulated by the first mutual funds and by the bull market that began in 1983 (and lasted 15 years). The stock market crash of 1987 was almost a blip as the long-term time series continued to impress. The prolonged bull market of the 1990s then transformed the scale of the industry. The rapid wealth creation created by the stock market prompted savers to switch to mutual funds and/or equity-linked insurance products. The fund management industry entered its golden period.

The cult of equity that accompanied this golden period was endorsed by institutions impressed by long-term, real return series that estimated annual equity returns at 9.27%. This provided a further boost for the fund management industry.

The good times were rudely interrupted by the bursting of the technology bubble in 2000. Following the bear market, a bull market returned mainly due to a low interest rate environment. The low debt consequently fuelled a borrowing binge that led to the credit crisis of 2007–08.

Coincident with this dramatic stock market backdrop, as explained in the previous chapter, the industry became more professional. A number of major developments were behind this:

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- ◆ the formalisation of a professional body of knowledge, based on finance theory;
 - ◆ the appeal and rise of indexation, and the subsequent evolution of enhanced indexation;
 - ◆ a dramatic rise in computer processing power, allowing complex correlation and analysis;
 - ◆ the construction of optimal portfolios and the use of risk-monitoring tools;
 - ◆ the growth in the fiduciary mindset and a more formal distinction between the sell and the buy side;
 - ◆ the adoption of hedging tools and product wraps that better suited clients risk profiles; and
 - ◆ the widespread measurement and attribution of performance and skill, as well as the adoption of Global Investment Performance Standards (GIPS).
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In short, the industry not only grew in size but also in stature, complexity and professionalism. There were also a number of significant structural changes in the 1980s that helped shape the industry. That decade saw the beginning of the demutualisation of the stock exchanges and the abandonment of restrictive practices such as fixed commissions at brokerage firms. As ownership structures evolved, the industry began to aggregate assets under management through consolidation. The era of the billion US dollar AUM fund management companies was born.

Building on the rapid pace of innovation, at about the same time the industry began to change its focus from relative return to absolute return. This led to – or could be said to have been triggered by – the hedge fund phenomena, the importance of which is discussed in final chapter of this report. Hedge funds now have in excess of US\$1 trillion under management and, in many instances, due to the frequency of their trading, are the marginal price setters and providers of liquidity in the secondary markets. Although the traditional fund management industry still dwarfs them in terms of assets under management, their importance to the changing nature of the industry should not be underestimated.

The new compensation models and the intellectual freedom afforded individual fund managers at hedge funds had a profound effect on the way the traditional long-only industry was structured. Indeed, the rise of hedge funds resulted in the ownership structure of the industry changing dramatically. Once the preserve of private and universal banks, an increase in independent players soon became apparent, mainly because the desire for ownership is more ingrained in the mindset of the fund manager than in most other professions. Most fund managers are, after all, trained in financial analytics. They intuitively see the attractions of the business model and, indeed, their own contribution to the creation of shareholder value. As such, it is not surprising that such individuals demanded a greater share of the value they were creating.

All these changes opened up the industry – there are now more fund managers than at any point in history. Fortunately, more and more clients are outsourcing such activities, particularly pension and insurance firms. This is because they have wider geographic remits, deeper asset classes and increased financial complexity to contend with.

Many came late to the party, such as those foundations that were not schooled in fund management, or that even believed in market efficiency. However, this client subset is now one of the most enthusiastic supporters of hedge funds.

Although consolidation is rife, the industry has not had a great track record on mergers and acquisitions. Such transactions are complex, time consuming and expensive; they are often undertaken to increase assets under management, but rarely benefit from the synergies hoped for. A number of very large fund managers have, however, emerged from the process.

The pendulum began to swing back towards the large fund managers following the 2007–09 credit crisis. The global downturn had a big impact on the industry. In the build-up to the crisis, product innovation sought to satisfy the never-ending appetite of institutional clients for uncorrelated returns. Some of the resulting products have now been discredited. As the saying goes, in times of crisis all correlations approach one. Duration mismatches and too much leverage were largely to blame. The credit crisis also threw the business relationship between fund managers and their clients into stark relief. The industry had to adapt and focus more on liquidity, trading volumes and continuity of business relationships. Many of these trends are discussed in the next section.

Geography

There is wide disparity in the geographical distribution of the fund management industry. It could logically be assumed that the industry would

congregate wherever there is a concentration of assets, but this is not the case. For example, wealthy Saudi Arabia has hardly any fund managers of size. Likewise, offshore centres with little wealth or population can have a large fund management industry. Needless to say, cities with a large population are most likely to have some fund management capacity. Surprisingly, capital cities do not fare well – Washington, Berlin and Beijing are dwarfed in their capacity by New York, Frankfurt and Shanghai, respectively. The key is that fund management capabilities grew up alongside historic trading ports, where there were fewer restrictions, and once the human capital was established tended to remain there.

As would be expected, the US and Europe are the main mature geographies. However, both Australia and South Africa are also mature geographies, and Australia has very large superannuation assets. Indeed, it has more money invested in managed funds per capita than any other economy in the world. It benefits from compulsory superannuation and a diversified economy. Consequently, it has seen the development of a significant domestic fund management industry.

The Japanese fund management industry actually contracted for 20 years following its property bubble. More recently, it has seen a return to growth following the removal of restrictions that permitted only securities firms to distribute funds. The lifting of this restriction meant that banks and insurance companies, which account for about 40% of all assets under management, were able to engage in fully liberalised over-the-counter (OTC) sales of unit-linked insurance products. At the same time, the entrance of Japan Post to the investment trust market, with 24,000 post offices in the country and 28% of Japan's household savings, was a significant game changer.

With the increase in technological innovation in the industry, location should no longer be an issue. It is possible to manage assets from anywhere in the world. Indeed, the Norwegian group Skagen prove this by managing their award-winning global fund from sleepy Stavanger. That said, the key determinants of geographical location normally include:

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- ◆ access to a pool of skilled investment professionals;
 - ◆ a tax-friendly jurisdiction for fund structures; and
 - ◆ links and access to deep and liquid capital markets.
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It is important to have all of the above in place, not just one or two of them. Some jurisdictions, such as Luxembourg and Singapore, understand this very well. Geography also comes into play in the way fund managers structure their product offerings. Legal differences are covered in more detail in Chapter 4.

Geography is also an important consideration when it comes to distribution. In the US, distribution is either done by full-service broker-dealers or via investment consultants. The former have large retail sales forces that are compensated mainly on the basis of commissions earned and assets under management. Investment consultants, on the other hand, are paid by the client. In Europe, bank branches dominate, particularly in Germany, France, Scandinavia and Spain. In the UK, distribution is more fragmented and has a large number of independent advisers.

The Internet is changing distribution and geographic boundaries and is expected to become more important going forward. This is especially so in distribution without advice, as transactions can be separated from investment advice, in terms of both product and pricing. Direct fund distribution, however, has been slow to take off. The few attempts at this, such as Direct Anlage in Germany and Virgin Direct in the UK, are pioneers in this sort of distribution.

Geography and Investment Strategy

On the portfolio construction side, geography has an important influence on the domicile of the assets that are invested into. The fund management industry and its clients all suffer from home country bias. Institutional investors, although aware of this, continue to maintain an investment process that separates policy portfolios into domestic and international at the strategic level. This, in itself, creates a significant home bias that brings an imbalance to domestic asset classes.

The oft-cited reasons for keeping a disproportionately high allocation in domestic equities include:

- ◆ international markets are hard to access;
- ◆ domestic equities are a better match for domestic liabilities; and
- ◆ international equities are more risky due to currency risk.

The fund manager should be aware that geographic portfolios exhibit different levels of cross-sectional volatility and, hence, any self-imposed geographic restrictions result in a smaller opportunity set.

From the portfolio context, country factors are not always dominant. In Europe and the US, sector dominates. That said, in emerging markets, country still dominates. As such, fund managers should approach geographies with different approaches to alpha capture.

Some fund managers have changed their equity allocation approach and investment process to address new geographies and globalisation. In particular, emerging markets have become a common rather than neglected asset class. Indeed, some fund management clients and consultants have considered taking this one step further by removing the domestic/international divide and adopted a global equity approach to asset allocation. Such an integrated geographic approach takes global equity as a single strategic asset class, and places the entire global equity universe as the natural starting point for equity allocation.

Geography and Growth

In geography terms, it is not just where you position portfolios that matter to a fund manager, but where you source clients from. The growth markets are in those geographies where wealth is being generated at a rapid rate. The Asia-Pacific region, which includes Australasia, South Asia and Northeast Asia, is one of the fastest growing. In the past, developed economies witnessed the same sort of growth during the industrial revolution.

The fund management industry in Asia is experiencing tremendous growth, and hedge funds are contributing significantly. In the past, the Asia-Pacific industry was focused on the most developed economies, such as

Australia, Hong Kong, Japan, Singapore, Taiwan and South Korea. More recently, managers without distribution have tended to focus on the two most significant developing markets in the region: China and India.

The demographic and economic fundamentals in the Asia–Pacific region are a positive for the industry. Middle class wealth is on the rise, but there is limited existing penetration of structured or managed products in many markets. Foreign mutual firms seem to be recognising the need for local presence and many now have managers, research analysts or distribution operations in the region. That said, 70% of all the funds sold in Hong Kong are European-wrapped Undertakings for Collective Investment in Transferable Securities (UCITS) funds. At the same time, polarisation between large, branded fund managers and niche institutional managers is also occurring in the Asia –Pacific.

Singapore’s pro-business regulations, mature infrastructure and governmental support for the fund management sector has also captured a lot of the smaller boutiques starting up in the region. Its government provides significant tax incentives for the fund management industry. Three noteworthy tax incentives are a tax exemption for offshore funds, a tax rate of 10% for the fund manager and tax exemption for Singapore-resident funds.

Clearly, new and emergent economies, such as those in Brazil, Russia, India, and China, are also likely to experience rapid growth in their nascent fund management industries. Indeed, such developments can occur very rapidly.

Addressing new markets

The process of penetrating new markets is a difficult one. In practical terms, entering a new country is very similar to a start-up situation, with no sales and no marketing infrastructure in place. The fund manager should therefore start by analysing the new geography, and then decide on which funds it wishes to promote. That said, it is more common to see firms treat international markets as opportunities to increase sales of existing products, and adopt a sales drive rather than an analytical approach.

Most fund managers participate in geographic expansion in an indirect way, using an independent local distributor or agent. The differences between domestic and international marketing could be said to be just a matter of degree. In this respect, large fund managers are multi-level in their decision focus. That said, when it comes to doing business in new geographies, country managers normally focus first on mandate wins and not management of the funds themselves.

Whenever a company enters a new geography, it will inevitably be influenced by its previous experience. The greater the number of national markets in which a company participates, the more likely it is to seek to manage them as an aggregated network, rather than as independent units.

In practice, the marketing strategy in differing geographies changes rapidly. It is driven not only by market characteristics, but also by organisational development, as the economics and knowledge base develop. In fund management, internationalisation takes the form of a replication strategy, which involves seeking out a geography in which a firm can exploit an advantage. In such instances, a company should retain some control. Generally speaking, entering into joint ventures is a good policy, and it is crucial in new geographies not to lose control of the manufacturing, as the skill of the fund manager is the core of the business.

Skill in Fund Management

The biggest driver of change in fund management is the search and competition for skill itself. Skill is often termed alpha by the industry, although the best definition of the term is risk-adjusted outperformance of a chosen benchmark or index.²

It should be pointed out that it is not possible for every firm to deliver above-average performance, although all active managers claim this is indeed what they are trying to deliver! There are a number of observations that can be made about alpha:

- ◆ it comes from security selection within an asset class;
- ◆ it is skill based and, as such, demands talented individuals;
- ◆ it can only be achieved in a systematic way; and
- ◆ it can sometimes be confused with luck.

The rise of alpha return investment strategies in the last 15 years has focused the industry on hedge funds and other absolute return approaches.³ A widening gap has materialised between the performance metrics of traditional fund management firms and alternative providers. Skill, in fund management, has become a lot more important.

Indeed, Table 2.2 shows the relative importance of skill to the other selection criteria from a clients perspective.

Table 2.2 Selection criteria for fund managers

Source: Watson Wyatt

Criteria	Importance
Manager skill	1
Transparent investment process	2
Client service	3
Outperforming benchmarks	4
Risk management	5
Competitive fees	6
High absolute returns	7

Not surprisingly, skill is the most important reason to select a fund manager. New buzzwords, like alpha extraction solutions, have been created to try to differentiate firms various investment strategies and rebrand companies along the lines of skill.

Active Return

When talking about skill it should not be forgotten that the aim of “active” fund management is to deliver active return. That is, to outperform a benchmark in a risk-adjusted way. Theory suggests this can be achieved in three ways:

- ◆ opportunity (cross-sectional volatility);

- ◆ aggressiveness of weights in portfolio; and
- ◆ skill in selection.

In all of these three approaches, the return is the sum of the exposure of the portfolio to the sources stated. One way to increase return is to take bigger positions, namely aggressiveness. Obviously, this increases the risk. The fund manager, alternatively, can focus on capturing the decomposition of the cross-sectional volatility through skill or opportunity. These can be found within the following sources of return:

- ◆ style (eg, value and momentum) with a cross-sectional volatility of one;
- ◆ country with a maximum cross-sectional volatility of 0.25;
- ◆ sector with a maximum cross-sectional volatility of 0.25; and
- ◆ stock specific with a cross-sectional volatility of about 0.5.

If there is no cross-sectional volatility, there is no opportunity for active fund management. As can be seen from the bullet points above, the greatest opportunity is therefore to be found in style-based fund management approaches.

As has been shown, the approach to capturing inefficiencies is important. Fund managers should be able to define their alpha capture in a number of different ways. Clearly, defining it by style has the greatest opportunity set. It should be noted, however, that the variation of return contribution from each of these varies dramatically over time. During the Internet bubble, for example, industry returns were more important and technology sector funds were the top performers. Likewise, value as a style performed very well until the credit crisis, when the style's bias to the banking industry, whose stock prices were decimated, began to underperform. Therefore, it is not just asset allocation, but also style that is crucial for the client to get right.

Information Ratio

Information ratios (IRs) provide the litmus test of active management (Grinold and Khan 1992). The formula is as follows

$$IR = \frac{E[R - R_b]}{\sigma} = \frac{\alpha}{\omega} = \frac{E[R - R_b]}{\sqrt{\text{var}[R - R_b]}}$$

where R is the portfolio return, R_b is the benchmark return, $\alpha = E[R - R_b]$ is the expected value of the active return and $\omega = \sigma$ is the standard deviation of the active return, which is an alternate definition of the aforementioned tracking error.

The information ratio measures the manager's excess returns over an appropriate benchmark relative to the standard deviation of those excess returns. By computing risk on a relative return basis, the IR effectively eliminates market risk, showing only risk taken from active management. A high information ratio differentiates skill from luck in active management.

As a rule of thumb, a ratio above 0.5 is considered good; anything less is not justifying active fees. Top quartile managers tend to have information ratios above 0.5, and 0.75 is considered to be very good. Numbers above 1 are exceptional and in the top decile of performance. Negative numbers should

make fund management firms evaluate their investment process and managers.

However, statistics should always be addressed with caution. Even a good manager with an information ratio of 0.5 could theoretically underperform three years in a row at some point over the following 40 years assuming he hangs around that long.

The information ratio does, however, provide valuable information – not just to the client but also to the fund manager. Richard Grinold coined the term the fundamental law of active management, in which he illustrated how a fund manager should view the information ratio. He expresses the information ratio in terms of two other statistics: the “information coefficient” and the “breadth”. It is now widely understood in fund management circles that these two elements must be maximised in order to achieve a high information ratio.

$$IR = IC \cdot \sqrt{BR}$$

where IR = information ratio

IC = information coefficient ("skill")

BR = independent bets per year ("breadth")

In this expression, the information coefficient measures skill and the breadth measures the number of independent decisions a manager takes per year. What the law effectively states is that, in order to achieve a high information ratio, a fund manager must show skill for every asset chosen and must diversify that edge over as many separate assets as possible. The implications are that, given some skill, fund managers should make decisions as often as prudent, combine investment models and avoid market timing. If a fund manager cannot do this, they may as well track an index.

Index Tracking

The growth of index funds has been substantial, with the industry developing many index-linked and index-tracking products. The approach is intellectually compelling to many clients.

The index-tracking part of the industry focuses just on the market return, or beta exposure. By way of background, it should be understood that the term beta derives from the capital asset pricing model (CAPM). According to the CAPM, returns reflect risk. In this respect, beta measures a share's relative volatility. In other words, it shows how much the price of a particular equity rises or falls compared with how much the stock market as a whole rises or falls at the same time. The index-tracking industry grew as a result of the CAPM's message –that it is only possible to earn higher returns than the market as a whole by taking on higher beta risk.⁴ It is particularly compelling in highly efficient markets where fund managers find it difficult to outperform markets.

While the objective of index funds is to replicate both the returns and risks of the underlying index, tracking error in performance is unavoidable. If a fund manager is focusing on delivering such a product, they should:

-
- ◆ keep commission costs as low as possible;
 - ◆ keep market impact costs minimal;

- ◆ maintain a predictive model on the index being tracked; and
- ◆ handle cash inflows and outflows instantly (possible using a futures market).

Index trackers aim to identify an efficient set of portfolios that minimise the variance of the difference in returns with respect to the index being tracked. The mean and standard deviation of this excess return, which in an active world would be the active return and active risk, respectively, is termed the tracking error in the passive world. Since the objective is to track an index as closely as possible, the resulting set of portfolios is sometimes referred to as the tracking error efficient frontier.

Tracking error in index fund performance can be decomposed into two components: an internal component arising from an open-end index fund's replication of the underlying index, and an external component that arises from changes in the constituents of the underlying benchmark. Dividends may also cause tracking error in performance where there is a timing delay in their receipt, as well as the index rules governing the treatment of dividends.

Fees, however, act as the biggest drag on index-related portfolios. There is an increasing belief that paying high fees for beta products is unacceptable. In fact, such products usually have low fees. According to the SEC, the operating expense ratio of an index fund is some 45 basis points lower than an equivalent fund that is not an index fund. Those firms that are still charging expensive fees for such products are now rethinking. HSBC Global Asset Management, for example, cut its fees for index funds to 0.25% from its previously ranged UK offering of 0.5–1%.

The fund management attention on performance versus indexes has seen many so-called active funds morph into what is termed closet indexers. This is where fund managers remain very close to the index (low tracking error) and then buy and sell stocks to justify active management fees. It is difficult to understand, or indeed make any sort of case for, such practices, as it implies the active manager does not have faith in their own abilities.

As a final word on indexation, it should be pointed out that full replication of an index is not necessary if some tracking error is acceptable. An index can be tracked satisfactorily with a subset of its components. The trick is to capture as much of the systemic risk and return as possible.

Systemic Risk and Return

When discussing market return it is worth remembering that every investment has a systemic risk element. In this respect, the systemic return or beta factor is the measure of volatility in terms of market risk. The beta factor of the market as a whole is 1. The relevance of this lies in a number of strategies that have evolved from indexation. These include tilting the index (to, for example, higher betas) and enhancing the index (through selectivity or stock lending).

The point is that market risk makes systemic returns volatile and the beta factor is simply a yardstick against which the risk of other investments can be measured. From a fund management perspective, systematic risk cannot be removed by diversification. This risk represents the variation in an asset's value caused by unpredictable economic movements. The indexation

approach aims to generate long-term systemic returns by diversifying away unsystemic risk. Systematic risk is essentially the element of risk that will always remain in an investment despite holding a well-diversified investment portfolio. If an investor does not want systematic risk, then they should be prepared to settle for a risk-free return.

Historic data provides one way to think about rates of systemic return. Indeed, it is possible for fund managers to make forward forecasts. The long-run real return on equities, looking forward, is forecast to be about 6–6.5%. This assumes a P–E ratio of around 20 and dividend payouts of about 3–3.5%. Such a scenario assumes steady-state growth rate in GDP at around the 3% level. Obviously, every fund manager can make their own forecasts, and these will differ. The real return, however, on long-run, 30-year inflation-indexed Treasury securities is about 3.5%, equating to an equity premium in the order of 2.5–3%, which is what consensus believes is about the right level. However, as with any statistic, caution is advised. One must take into account that there was a structural decline in the equity premium during the 1980s and 1990s. Even so, equities still remain the most attractive asset class to hold in the long run.

The Asset Class Spectrum

The fund management industry manages the full array of asset classes, from public to private and bond to equity. The term asset class refers to the different categories of financial securities in which it is possible to invest. The main types of asset classes are shares, property, fixed interest investments and cash. Within each asset class, there are further asset types. For example, within equities the industry discriminates between domestic and international equities and, for international equities, specific regions or countries.

Figure 2.2 shows the risk–reward spectrum as far as fund products are concerned.

Figure 2.2 Differing product risk - return profiles

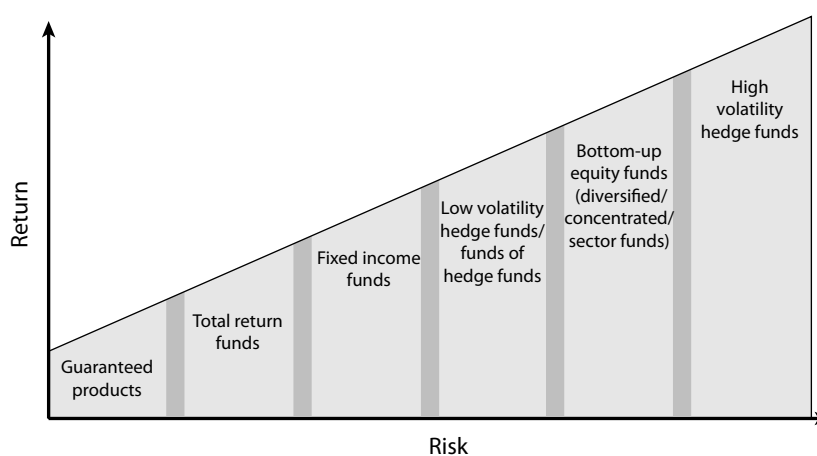


Figure 2.2 shows a risk–return trade-off. Guaranteed products have certain pay-outs but the price paid to secure this optionality means they typically have a lower return. Hedge funds are shown at the top of the risk–reward scale as they take more concentration, market timing and leverage risk. That said, it is quite possible that some strategies are lower risk (for example, market neutral).

Private equity is one of the most illiquid asset classes – if it was included in Figure 2.2 it would be considered to be high risk but high return. In a perfect world, there would be no differentiation between public and private markets but, in reality, a premium is always paid to taking liquidity risk. Clearly, the world is not perfect and capital markets are segmented and have varying degrees of fungibility. This presents challenges to fund managers, particularly as it relates to unlisted securities. Many fund managers, as a result, choose not to offer the private equity product.

Property is another illiquid asset class. There is no centralised market available to match all purchasers to all vendors. One of the historical reasons that property has been cited as a worthwhile asset is because leverage can be secured against both property and income. Interestingly, although many private and institutional clients of the fund management industry have property exposure, few fund managers offer it as a product class. Property is covered in more detail in Chapter 14.

The main reason why institutional investors invest in illiquid asset classes is to improve the return of the portfolio – the market is generally considered inefficient due to illiquidity and a lack of transparency in pricing.

At the other extreme, derivatives are another area where the risk–return profile for fund management products gets skewed. Fund managers can benefit from using derivatives markets to actively manage their asset allocation decisions in a systematic manner. In particular, option portfolios can be used to enhance the performance of tactical asset allocation programmes by consistently adding value during the periods of low volatility when timing strategies are known to perform rather poorly.

Fixed income fund managers also have style differentiation with risk–return tradeoffs. That said, there has not been the same focus on this as on the equity side, and often firms try to capture multiple sources of return. Goldman Sachs Asset Management, for example, claims to capture portfolio performance on the fixed income side by employing a “diverse array of active investment strategies”, which it says it sets within a disciplined risk management framework. The firm does not, however, identify how these strategies are related, or indeed how the inefficiencies are expected to be captured.

David Swensen, who wrote *Unconventional Success: A Fundamental Approach to Personal Investment* while working as chief investment officer at Yale University, claims that only six asset classes are needed to succeed in investment. He lists these as:

-
- ◆ domestic equities that have an equity premium and provide long-term protection against inflation;
 - ◆ international developed country equities that also enjoy foreign currency diversification;
 - ◆ international emerging market equities as a high-risk and high-return portion of a portfolio;
 - ◆ real estate for return and risk that falls between bonds and equities, high correlation with inflation;
 - ◆ Treasuries for diversification relative to equities when inflation differs dramatically from expectations; and
 - ◆ inflation-protected Treasuries as a hedge against inflation.
-

However, there are many other asset classes and clients are advised to select an appropriate strategy to capturing return from these. Other core asset classes not mentioned by Swansen include corporate bonds, high-yield bonds, tax-free bonds, mortgage-backed and other collateral-backed fixed income instruments, foreign currency, hedge fund strategies, commodities and even forms of private equity such as leveraged buyouts and venture capital. The clients need to determine their own style for selecting asset classes in the same way that a fund manager has to develop a style for managing an asset class.

The Style Spectrum

Investment style is the way a fund manager invests their assets, and there is a full spectrum of methods for doing this. Styles typically share a common characteristic, which can be based in law, in markets or in fundamentals. In some cases, the cashflows of assets in the same style are highly correlated, as with automotive industry stocks, while in other cases, such as closed-end funds, they are largely uncorrelated. Some styles are relatively permanent over the years, while a few persist only for a short while.

Although there are many different styles used by managers, the most common can be summarised into the two (already mentioned) broad categories: “active” and “passive”. There are, however, many ways each of these broad styles can be approached. For instance, returns-based style analysis is an attempt to decompose the style of a fund manager in the active world.

Style analysis is facilitated by the fact that a fund manager achieves their returns by capturing a particular security characteristic. Returns-based analysis involves using the past returns on these characteristics, and comparing them to a manager’s portfolio along with those of the indexes that represent different investment styles. In this way it is possible to determine the relationship between the fund and those specific styles.

Generally speaking, the more highly correlated a fund’s returns are with a given style index, the greater the weighting that style is given in the statistical assessment. All active style factors identified in this way have the following properties:

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- ◆ they contribute significantly to risk;
 - ◆ they are intuitive;
 - ◆ they are consistent with the portfolio manager/analyst’s view of the world; and
 - ◆ they are distinct from each other.
-

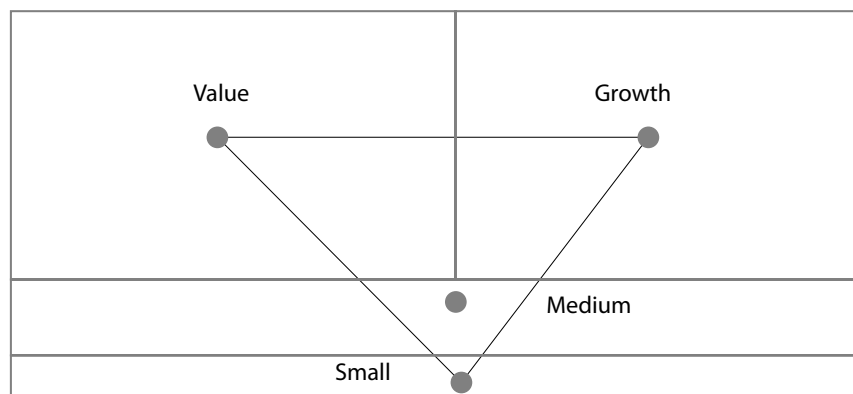
In the same way that risk can be split into a number of sources, the historical performance of a portfolio can also be measured and then split into the same sources. These are:

-
- ◆ earnings variability;
 - ◆ financial leverage;
 - ◆ foreign exposure;
 - ◆ historical volatility;

- ◆ labour intensity;
- ◆ liquidity;
- ◆ market sensitivity;
- ◆ recent success;
- ◆ size;
- ◆ value; and
- ◆ yield.

The most common style divisor in the institutional universe is illustrated in Figure 2.3. This divides the equity universe into four mutually exclusive and exhaustive groups. The first two represent a partition of the stocks in an index. The fund manager ranks his universe according to the ratio of the most recently published book value per share to a previous month-end price per share. A dividing line is drawn so that approximately half the total value of the index constituents are placed on either side. Stocks with high book-to-price ratios are placed value names, the remainder are growth names.

Figure 2.3 Dividing the investment universe along style lines



A similar procedure is followed for constructing the size styles. Medium capitalisation and small capitalisation stocks are ranked on the basis of total outstanding market capitalisation, and a dividing line drawn so that approximately 80% of the total value is above the line and 20% below it.

The value style that is identified from this process is similar to the value style performed by many fund managers. This particular methodology identifies companies whose value in the market is actually less than the intrinsic value of the business. Selecting growth companies, in contrast, focuses on companies that are experiencing a rapid rise in either sales, margin or net profit. The valuation is typically more expensive than for more mature companies, but, over time, if they deliver the growth the valuation will come down.

Fund managers that employ an active investment style continually monitor the markets and change the investment mix of their funds depending on where they see the markets heading. Active managers have the ability to substantially alter the investments of a fund in anticipation of opportunities for higher returns. Passive managers, on the other hand, merely try to replicate the performance of a market index or benchmark. As a result, active managers have far more in the way of style differences than do passive managers.

Style and Client Preference

A fund manager manages the client's investment portfolio based on the objective of maximising returns subject to a specified level of risk; however, the fund manager has to follow the style preference of their client. Private investors have less defined styles than fund managers, although they do have a preference for capital preservation. Institutional investors are very focused on style selection.

Private investors often make the mistake of buying high and selling low. Some, therefore, prefer an absolute return style. Some private investors meanwhile prefer to have portfolios designed to provide income. Often they like funds that are invested in bonds, corporate bonds and government bonds, with small portions dedicated to equities. These are termed balanced funds. An investor that likes this style is not concerned with growth but prefers the safety of income, hence the bond exposure.

Balanced is the most common style category for private investors. However, because this style is called balanced does not mean it is split 50/50. The goal is to provide capital appreciation as well as income to reduce volatility.

The growth style is a somewhat more aggressive category that aims to provide capital appreciation and little or no income. Typically, the majority of the funds will be invested in equities and very few in fixed income and, as such, this is suitable for risk-tolerant clients who are either a long way from retirement or institutions that have a long duration.

Information on fund styles is important for numerous purposes, such as portfolio construction, performance attribution and risk management. Unfortunately, many fund managers know this and try to game the system. Fund self-declaration is prone to strategic misclassification. Some fund categories such as managed futures are largely consistent in their self-declared strategies. Hedge funds, however, display very limited return similarities. Indeed, some fund managers perform undisclosed changes to their trading style over time.

Examples of Different House Styles

There are as many different styles as there are managers, but broad classification is possible. A number of commercial companies perform this service. The most famous of these, Morningstar, routinely classifies funds into styles based on firm size (small-, mid- and large-cap) and fundamental attributes (value, blend and growth).

Styles such as sector rotation, where fund managers move in or out of a sector as the economy changes, or earnings momentum, where the manager overweighs stocks displaying above average earnings growth, are harder for companies like Morningstar to define. For example, JPMorgan Asset Management (JPMAM), which, as at June 30, 2008, had assets under management of US\$1,200 billion, pursues what it calls a global dynamic style, that is, a style that aims to select the best growth and value stocks from across global stock markets and market capitalisation segments. Its style is actually diversified across style factors, with the portfolio being long of value and long of growth at all times. While being benchmark aware, this strategy is not benchmark focused and proves difficult to classify. While clearly successful in what they do, the author advocates a more focused approach.

In contrast, Deutsche Asset Management has a more defined style. It has over €536 billion in assets as at December 31, 2009 and employs 870

investment professionals. It pursues a systematic bottom-up approach. Its strong style is supported by a focus on identifying future investment themes. Security selection is the main element of the investment style, which is displayed by how they analyse a firm's track record (with sector allocation coming out as a residual).

It is easier for the smaller firms to have a defined style than the larger ones. One such boutique, SVM Asset Management is a privately owned firm based in Edinburgh that not only pursues a distinct value style but also encompasses much of the trends identified in the industry. The founding directors and staff own 100% of the equity and the firm sticks to its principal specialisation in developed market equities. However, it utilises variable bias strategies in its hedge fund with an emphasis on stock alpha, both long and short. Another boutique, Silk Invest, based in London, focuses its style on capturing long-term structural opportunities deriving from the industrialisation of nascent emerging stock markets, which it terms frontier markets.

Regardless of what style is pursued, the fund manager has to wrap the product in a way appropriate for the client.

Wrapping the Product

The fund management industry has a number of different ways to wrap products in order to market them to different clients. In the US, the term "wrap accounts" is used to describe one such variant. The industry also wraps structured products and single strategies, in addition to the standard collective funds and segregated mandates discussed at the end of this section.

A wrap account is the industry term for a bundle of investment services all wrapped under a single fee. There are essentially two types of wrap investment products on the market: the traditional wrap account and the mutual fund wrap account. Traditional wrap accounts offer a full range of securities, along with the expertise of outside fund managers with different investment styles. Traditional wrap accounts are customised according to clients' investment horizon, goals and risk tolerance. Mutual fund wrap investments, meanwhile, are made up of only mutual funds. Wrap accounts are generally based on an asset allocation model with more than one fund or product incorporated into them.

In Europe, the growth of UCITS III funds is also creating opportunities to wrap product as fund of funds. The UCITS rules impose liquidity and leverage restrictions designed to protect investors from excessive risk.

Sometimes products can be structured so as to avoid fund rules. In Germany, for example, fund managers have created a large market in certificates structured on specific investment ideas, as opposed to funds. These are not governed by the UCITS rules and provide the fund management industry with a short time to market and flexibility in product wrapping. Investors, however, appear to be unaware of or ignore the counterparty risk of such products.

Wrapping product for the two "customer focus" extremes, pure private client wealth management and pure institutional fund management, is very different. On the one extreme, institutional goals are actuarially determined to match complex asset and liability mixes, and wraps are legally tailored. Indeed, such institutions often run their own investment firms or departments, charged with meeting long-term funding goals. On the other extreme, private clients – who have a myriad of personal requirements, including tax-

ation and inheritance issues – require bespoke management. Indeed, many ultra high-net-worth individuals now have their assets managed in-house by what is called a family office. Although the business models may be similar, these extremes have very different cost structures.

Segregated Funds

The most tailored wrap is a segregated mandate. This is a composite of assets that are managed as fiduciary property by the fund manager for the account of the underlying investors. It is separated from the assets of the fund management firm and therefore constitutes an entity in its own right.

Segregated mandates are designed and managed in a tailored way to the precise requirements of a client, and are more common among larger pools of assets. Such tailored mandates might have pronounced style bias or a tweaked risk level, or perhaps a special sector emphasis, whatever suits the overall portfolio. Other benefits mean:

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- ◆ they can undertake securities lending, and therefore make an additional fee;
 - ◆ they can have customised constraints and risk parameters;
 - ◆ they can use the clients' own custodian; and
 - ◆ changing managers is easier.
-

If an account is established as a separate account managed by financial institutions, the contract between plan sponsors and the fund manager should clearly state the responsibilities of the latter with respect to the management of the client.

One of the advantages of a segregated mandate is during the manager change process. Rather than having to sell a fund and then reinvest the cash (which means that the money is out of the market for a time), responsibility for the basket of securities in a segregated account can simply be assigned to a different manager.

Another advantage is that the owner of the assets does not have their performance or assets impacted by the investment or redemption of other managers.

A typical segregated account is The People's Dispensary for Sick Animals (PDSA), a UK veterinary charity. The PDSA applies a segregated approach to its £70 million of investments, which are managed by Newton Investment Management. The latter are mandated to apply negative screens in line with PDSA's policy. PDSA decided to adopt this ethical screen primarily to manage potential risks to its reputation – the policy was developed at a time when the supporters of animal charities were growing increasingly interested in how charities invested their money. PDSA were therefore keen not to alienate supporters and donors. Such an approach is very bespoke, and indeed different from that pursued by comingled, pooled or collective funds.

Comingled, Pooled or Collective Funds

The most common wrap in the industry is the provision of investment portfolios in the form of collective funds, sometimes called comingled or pooled funds. Such funds consist of assets from several accounts that are blended together. They are pools of money managed by a fund manager for the benefit of a number of unit holders. Such a wrap is usually termed a mu-

tual fund in the US and a unit trust/SICAV in Europe. With these vehicles, a unit holder effectively owns a portion of the fund, and shares in any increase or decrease in the value of the fund.

A mutual fund provides investors with diversification and shared economies of scale. These vehicles also tend to lower the risk and save on infrastructure requirements. The industry argues that the diversification these products provide usually results in lower volatility, because when some investments are doing poorly, others may be doing well.

Mutual funds offer a number of advantages, including:

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- ◆ diversification;
 - ◆ professional management;
 - ◆ cost efficiency;
 - ◆ liquidity; and
 - ◆ convenience.
-

By pooling professional management, the fund manager is able to achieve cost efficiencies. As a group, mutual fund investors can buy a large variety and number of specific investments. They can also afford to pay for professional fund managers and fund operating expenses, where they would not be able to afford it on their own.

Mutual funds offer clients a liquid way of investing. With most funds, it is possible to sell the fund for cash settlement. Such mutual fund shares are traded once a day at a fixed price. While stocks and bonds can be bought or sold any time, the markets are open at whatever price is available and it is often difficult to liquidate an entire portfolio.

Investors can invest in shares in a mutual fund in a few different ways, depending on the rules of the particular fund, which are often related to the way commission is paid to intermediaries. Funds are often described as either being no-load or load funds, depending on whether or not they charge a sales commission. Typically:

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- ◆ no-load funds charge no (or a very low) sales fee or commission – financial companies normally sell no-load funds directly to investors;
 - ◆ load funds charge a sales fee or commission for purchases – some funds charge the fee when an investor buys shares, while a few charge when investors exit; brokerage firms and banks often sell load funds, and help with paperwork.
-

A new and growing pooled fund vehicle that presents both a challenge and opportunity to the fund management industry is the exchange-traded fund (ETF). Assets in exchange-traded funds have increased significantly. These funds, with names like SPDRs, WEBs, diamonds and cubes, facilitate listed secondary market trading in their shares based on their net asset value (NAV).

In addition to open-ended mutual funds and ETFs, some products are closed ended – that is, they have a fixed number of shares in a limited liabil-

ity corporate investment vehicle. Such closed-ended funds are often listed on an exchange with a price that is traded at a discount or premium to NAV.

Industry Codes and Standards

As can be seen, the fund management industry is large and complicated. Industry codes and standards are therefore important to ensure it is both focused and professional. Webster's *New World Dictionary* defines a "standard" as "something established for use as a rule or basis of comparison in measuring, judging capacity, quantity, content, context, extent, value, quality, etc". Clearly, this is something that the fund management industry should have.

Codes and standards are often associated with ethical behaviour but, in practice, they are equally important to the operations of a fund manager. The ISO 10962 standard, for example, defines the properties of a financial product. It can be used to assist in unambiguous identification of a financial instrument. An ISO distribution policy attribute, for example, can be used to distinguish an investment fund from an income fund.

Clearly, any professional industry needs standards and in this respect fund management is no different. That said, much of the industry's codes and standards are voluntary. Voluntary standards are considered consensus standards since they are developed using a process that allows participation by industry stakeholders. This is different from a code, as compliance with a code is mandatory.

The main industry body is the CFA Institute, which in 2010 had more than 90,000 voting members and 136 societies worldwide. Its members agree to abide by its Code of Ethics and Standards of Professional Conduct. Its mission is to lead the investment profession globally by setting the highest standards of ethics, education, and professional excellence. The CFA Institute has developed a comprehensive set of standards. In addition to the Global Investment Performance Standards that are covered latter in this report, they also have an Asset Manager Code of Professional Conduct, Research Objectivity Standards and Trade Management Guidelines.

Panel 2.1 Industry Publications

- ◆ *Financial Services Review* is the journal of the Academy of Financial Services, an association for finance academics.
- ◆ *Institutional Investor* is a broader publication, useful for industry long pieces.
- ◆ *Investment Management Review* provides an overview of new developments and thinking in the asset management industry, globally and across a comprehensive range of sectors, including pension funds, mutual funds, hedge funds, private equity, structured products and ETFs.
- ◆ *Journal of Finance* is the top finance publication for academics.
- ◆ *Journal of Financial Economics* is a more quantitative journal.
- ◆ *Journal of Investing* is a general but high-quality journal.
- ◆ *Journal of Portfolio Management* offers good practical articles.
- ◆ *Professional Investor* serves the UK financial community.
- ◆ *The Financial Analysts Journal* is a high-quality journal that combines academic and practitioner articles.
- ◆ *The Journal of Financial Planning* is produced by the Financial

Planning Association, and covers a range of topics from investment strategies to managing the office.

- ◆ The Journal of Wealth Management covers a range of topics, from investment strategies to managing an investment office

Asset Manager Code of Professional Conduct

The CFA Institute Asset Manager Code dictates that there are certain key elements that all managers must follow:

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- ◆ act in a professional and ethical manner at all times;
 - ◆ act for the benefit of clients;
 - ◆ act with independence and objectivity;
 - ◆ act with skill, competence and diligence;
 - ◆ communicate with clients in a timely and accurate manner; and
 - ◆ uphold the rules governing capital markets.
-

The code is a great starting place for best practice and conduct. In effect, it outlines the ethical and professional responsibilities of fund management firms. It is written in a style that can apply, on a global basis, to firms that manage client assets as separate accounts or collective investment schemes.

Although many fund managers, particularly those in well-regulated jurisdictions, already have such procedures in place, they should use the Asset Manager Code to evaluate their internal processes. This will help ensure all principle exposures are part of the day-to-day *modus operandi* of the firm. The premise behind the code is that ethical leadership begins at the highest level of an organisation. Getting the code endorsed is therefore a process that should be adopted by the manager's senior management, board of directors and similar oversight bodies. Such adoption sends a strong message regarding the importance of ethical behaviour at the firm.

Research Objectivity Standards

The CFA Institute Research Objectivity Standards are intended to be specific, measurable standards for managing and disclosing conflicts of interest that may impede a research analyst's ability to conduct independent research and make objective recommendations. These are based on the ethical principles of placing the interests of investing clients first (before those of the analyst or the firm) and of providing full and fair disclosure of conflicts of interest.

The Research Objectivity Standards recommend specific practices to firms worldwide and their respective employees, in achieving objectivity and independence of research reports. The recommended practices and guidance are largely for sell-side firms. Fund managers should always be wary of sharp practices at sell-side firms, and insisting on the adherence to these standards is one way to do that. Some of the key recommendations of these standards include:

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- ◆ when discontinuing coverage, brokerage firms should issue a "final" research report and recommendation, explaining the reason for doing so;

- ◆ brokerage firms should prohibit research analysts from participating in marketing activities, including “road shows” for corporate clients issuing new shares of stock;
- ◆ brokerage firms should adopt a “three-dimensional” rating system that communicates risk and a time horizon in addition to the buy/hold/sell recommendation itself; and
- ◆ analysts who give media interviews or make other public appearances discussing their research recommendations should make the full research report available to the public at a reasonable price.

The standards prohibit both public companies and fund management firms from retaliating against research analysts who issue undesirable recommendations or ratings on corporate issuers. They also require public companies and fund management firms alike to establish formal written policies supporting independent and objective analyst research, and to have a senior corporate officer publicly attest at least annually that the company or firm is adhering to the policy.

Trade Management Guidelines

The CFA Institute Trade Management Guidelines were written to provide guidance for the trading function, an area that had been overlooked by all but the regulators. Regulators focus on outcomes and disclosures, so the guidelines were designed to formalise processes, disclosures and record keeping at fund management firms.

The guidelines form a systematic, repeatable and demonstrable approach to achieving the best execution expected by the regulators. The CFA Institute encourages fund managers to adopt as many of the recommendations as are appropriate to their particular circumstances.

The Trade Management Guidelines recommend that firms establish written policies and procedures that have the ultimate goal of maximising the asset value of client portfolios through best execution, taking into account each client’s investment objectives and constraints. The policies and procedures address how employees can manage effectively the quality of trades.

Disclosure recommendations suggest that fund managers disclose to current and prospective clients their general broker selection practices and any actual or potential trading-related conflicts of interest. This information helps clients assess a firm’s ability to deliver best execution, and thereby maximise the value of investment actions within their individual investment objectives and constraints.

In order to be compliant with this or any other guidelines, fund managers need to maintain proper documentation of compliance with its policies and procedures and the disclosures provided to clients.

In addition to aiding in the determination of best execution, the records may help a fund manager meet its regulatory record-keeping requirements and support its broker selection practices when examined by applicable regulatory organisations.

Trends

In addition to the trend towards better standards and disclosure, there are some other clear trends within the fund management industry. New entrants

continue to innovate and provide a catalyst for change. Partly due to this, financial complexity is increasing, as is the use of leverage. At the same time, globalisation is occurring rapidly for the fund management firms themselves, although globalisation is moving more slowly regarding the establishment of cross-border funds.

The regulatory trends are covered in Chapter 4 of this Executive Report. However, the trend to greater disclosure and liquidity have been formalised in fund regulation. In Europe, for example, the UCITS III cross-border framework now has over 250 different industry funds with over US\$50 billion.

Perhaps the most noticeable regulatory trend, however, is the rise in both the extent and cost of regulation. As though the regulatory issues were not enough, increased competition from other types of investment product, such as structured notes and certificates, is preoccupying the industry. That said, large firms are definitely getting larger, which is a function of scale efficiencies as well as mergers and acquisitions. The consolidation should provide grounds for product rationalisation. That said, often the stated objective of such mergers is to diversify product range or enter new markets.

In addition, the multi-decade trend for indexation identified earlier is resulting in the increased popularity of passively managed funds. Indeed, index tracking has perhaps become one of the most significant and robust industry trends. The development of capitalisation-based benchmark indexes, as chronicled in *A Guide to Equity Index Construction* by this author, has resulted in as much as 70% of some markets being indexed in a passive way to a benchmark. This trend has been exasperated by the fact that the average actively managed fund has returned 1.8% less than the broad indexes they track, a result that is nearly equal to the average expense ratio of mutual funds.

It is not just passive strategies that are witnessing change, the active side of the industry is also continually striving to produce better product, essentially product with better risk-adjusted returns. Delivering better value does not just extend to the performance of the product, but also to its price. Over time, investors have become increasingly aware of, and averse to, the fee levels in the industry. Indeed, they have learned to avoid high, front-end loads and negotiate where possible, and expect reduced or rebated fees. This cost pressure was addressed in more detail in Chapter 1.

There has been a notable increase in the number of different strategies, often disguised as asset classes, offered to ultimate investors. This trend has developed at the same time as demand for non-traditional markets and instruments, including private equity and venture capital. The many industry mergers have added to this profusion of strategies.

The trend toward increasing consolidation and specialisation has kept the senior management of many of the large traditional incumbents preoccupied. As a result, the rise of the boutique occurred largely unchecked. This trend is one that is widely predicted to increase.

All these trends will have a dramatic effect on the future of the industry. That said, the innovation and creativity of the industry is not always undertaken for the benefit of the customer. The biggest driver of innovation is fees, evolving investment themes and the application of new technology. When innovating, in order to remain client focused, fund managers should ask if new products deliver better value and services to their customer base. The industry is increasingly favouring performance fees, although fixed per-

centage of assets under management is still the dominant model. All these trends are structural in nature, giving the industry a new focus.

Structural Changes – the New Focus

The pace of change and the market backdrop has structural implications for the future of the fund management industry and, indeed, has given birth to its current focus. As the previous chapter also shows, the demand for superior fund performance was the driving force of changes in organisational business models. Investment strategies have become increasingly polarised across asset classes, and firms now often differentiate themselves along these lines. The growth of the boutique fund manager is also a manifestation of this new focus.

Structural changes are most evident at the national level. There are wide differences among national financial markets in the pace of development, in the character of the assets under management and in the nature of mutual fund marketing and distribution. There are, however, some commonalities in the nature of the structural change. Markets are opening up and international fund managers are establishing themselves in new territories as they do so. At the same time, financial markets are liberalising, becoming more transparent and homogeneous. That said, there are still widespread impediments to cross-border fund management due to taxation and regulation.

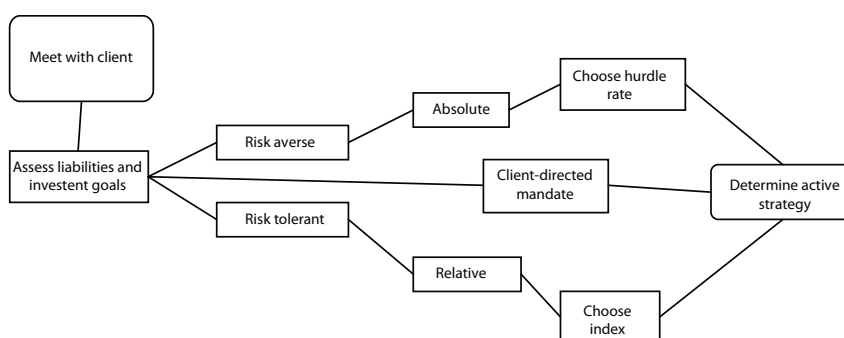
At the structural level, the pace of change in distribution is almost as fast as that of the “manufacturing” side of the business. Not only is open architecture becoming more prevalent at the expense of tied distribution, but the nature of individual relationships is also changing. Gone are the days where relationship alone could secure an investment mandate.

The distribution side of the business is being shaped by the adoption of passive portfolio strategies, one of the implications of widespread knowledge of modern portfolio theory. This is because some clients have learnt that the lowest level of risk for a given level of return can be obtained by using lower fee passive portfolios and a combination of risk-free government bonds and the market portfolio. This has powerful implications and has given rise to the aforementioned dramatic growth in indexation products and techniques.

Absolute versus Relative Reform

In addition to the active versus passive debate, the other significant choice is between relative or absolute returns. Once again, the background to understanding this is in financial theory. Relative returns are measured against an index that is constructed to mimic the market portfolio. Figure 2.4 illustrates the difference between these two types of return.

Figure 2.4 Absolute or relative return



The difference between absolute and relative return can be best understood by examining them from the client's perspective. In a bear market which falls, say 30%, a relative manager declining by 25% would argue that they have outperformed the market by 5%. Some clients, however, do not see this as success. They would prefer that the manager had preserved the absolute value of their assets. As part of this trend, Myner's review of institutional investment reported a long-run trend away from peer group benchmarks to customised benchmarks. This trend reflects trustees increasingly taking asset allocation decisions on the basis of advice from consultants, and then allocating management of a class of assets to a specific fund manager.

Care should be taken not to confuse absolute and relative with the alpha and beta concepts already mentioned. This often occurs because hedge funds are largely absolute return orientated, and traditional long-only funds are often relative return focused. The return generated from market exposure termed "beta" will always be present in a fully invested portfolio. The return that is generated from selection skill, termed "alpha", can also include market timing.

Alpha and beta are, however, now at the centre of the new focus. The reader is reminded, once again, that these derive from the slope of the securities market line and represent excess and market return. In this respect, it should be noted that:

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- ◆ alpha and beta are being separated;
 - ◆ clients are paying more for alpha than beta; and
 - ◆ both alpha and beta can be, and are being, leveraged.
-

Clearly, skill is what everyone wants to pay for. As a result of this, the concept of alpha and beta separation came from the client side of the business. Initially, this was in respect of having an active and a passive part of the client portfolio. The concept has now evolved further, and the term portable alpha is now used to describe the capture of just the alpha element of a fund manager's return.

There is a school of thought that suggests that traditional fund managers who do not provide "higher alpha" and/or "cheap beta" products will suffer pricing pressure. The industry, however, has put up a strong resistance to such pressure so far.

Conclusion

This chapter introduced the industry, its size and its differentiating factors. Despite the cost pressures, the industry remains profitable (apart from during severe bear markets) and, indeed, attractive. It is comprised of more than just fee generators, it also has investment buyers or asset owners, distributors, product architects and gatekeepers.

The industry benefits from tax certainty, transparent regulation on established legal context and a skilled workforce.

The dynamic nature of global stock and bond markets make it difficult to be exact about the true size of the industry's asset pool. What is certain is that more and more of the world's assets are now professionally managed. This has accelerated due to recent developments. More than 70% of publicly traded assets are managed in some form of professional wrap. The

indexation of assets continues at a fast pace, as does the fragmentation and growth of the alpha industry at the other extreme.

The chapter showed that change is happening at a fast pace as products evolve and instruments became more sophisticated, absolute return or “hedged” strategies are also becoming more popular. These are being championed by the more skilful managers, which is further fragmenting the industry.

The chapter began by covering the historic development of the fund management industry and ended with the trends that are shaping its future. All these have to be viewed from within the framework of modern portfolio theory and the capital asset pricing model. The next chapter focuses on the client, the mainstay of the industry.

Notes

1. International Financial Services, London Research.
2. Many investors evaluate performance relative to a benchmark and the trade off between risk and return. For other investors, this can prove unsatisfactory as they are not indifferent to the variance of absolute returns.
3. The term absolute return investing does not have a fixed meaning and, like so many terms in finance, can mean different things to different people. At its most literal, it encompasses all funds that are not benchmarked against a market index. It is important to note that any fund manager can call themselves absolute return managers (and often do). Absolute return funds typically operate with fewer constraints than other funds, with the greater breadth of opportunity producing a potentially superior risk-adjusted return for a given level of manager skill.
4. Active beta returns typically come from market timing. That is, increasing market exposure in up-markets and decreasing it in down-markets. Passive beta returns come from index fund exposure.

3

The Client Spectrum

“Once in the dear dead days beyond recall, an out of town visitor was being shown the wonders of the New York financial district. When the party arrived at the Battery, one of his guides indicated some handsome ships riding at anchor.

He said ‘Look, those are the bankers’ and brokers’ yachts.’

‘Where are the customers’ yachts?’ asked the naive visitor.” *Fred Schwed*

The spectrum of clients is almost as large as that of assets. They range from the large institution to the small private client. The world’s largest fund management client is reputed to be the Abu Dhabi Investment Authority (Adia), with US\$900 billion worth of assets under management. The world’s smallest is a single unit holder in a mutual fund.

The industry’s clients are not only differentiated by size, but also individual factors such as taxation and desired investment outcomes. In other words, they all have different assets and liabilities, investment time horizons and risk preferences. Fund managers should therefore tailor their investment offering accordingly.

It is not just the assets and liabilities that differ, the wealth profile and the institutional structure of the countries in which they are domiciled also vary widely. More advanced developed countries, for example, tend to have wealthier populations and good pension provision. As a result, they can support a well-developed fund management industry. Emerging economies, on the other hand, tend to create great personal wealth for a select few but generate little in the way of institutional assets. Because of this they tend to have nascent fund management industries.

Where the industry is established, the principal client types include:

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- ◆ charities;

- ◆ corporations (treasury functions);
 - ◆ credit institutions;
 - ◆ endowments;
 - ◆ fund management companies (where parts of the mandate are outsourced);
 - ◆ fund of funds;
 - ◆ governments and sovereign funds;
 - ◆ institutional investors;
 - ◆ insurance companies;
 - ◆ municipalities and regional government;
 - ◆ pension funds;
 - ◆ private individuals;
 - ◆ state enterprises (with excess cash); and
 - ◆ state treasury.
-

Clearly, this is a large pool of assets and a potential client base that has widely varying needs. The relative importance of each client group varies from country to country. They are defined by their size or nature. In Europe, insurance companies have the largest pool of assets as a percentage of GDP; in the US, fund management companies, which manage mutual funds, have the largest. Insurance represent around 55% of GDP in Europe, as opposed to 40% for collective investment funds and 29% for pension funds. In the US, investment funds have assets of 90% of GDP, while insurance companies have assets of about 35% of GDP. Pension funds are in the middle, with assets at 67% of GDP.

Although a number of these institutions are important, such as state enterprises or municipalities, they tend to only be small as far as fund management outsourcing goes. The institutions in the list also exhibit varying levels of financial knowledge and professionalism. Regulators address this knowledge gap by defining some as professional or expert clients and others as non-professional. Clearly, private individuals are non-professional. Professional clients, in contrast to individuals, are required to be authorised or regulated in order to operate in the financial markets. Although regulation is burdensome, the advantage is that they are in a framework where the provision of financial services and information is more flexible, both in terms of content and form.

Private individuals and retail clients typically require greater care on the part of fund management companies. The higher level of protection afforded them means, among other things, that certain financial instruments, investment services or trading strategies employed by fund managers are not suitable for them.

Regardless of client type, suitability tests have to be carried out to collect sufficient information on a client's experience in investment, services and transactions. This information should identify clients' financial situations and investment goals. The amount of information varies. Less information is required for professional clients, as they are deemed to possess, *ex ante*, the necessary knowledge and experience. Even so, regardless of the regulatory requirements, it is best practice and good business sense to have as much information on clients as possible.

Panel 3.1 CFA Institute Asset Manager
Code of Professional Conduct

Loyalty to clients

Managers must:

1. Place client interests before their own.
2. Preserve the confidentiality of information communicated by clients within the scope of the manager–client relationship.
3. Refuse to participate in any business relationship or accept any gift that could reasonably be expected to affect their independence, objectivity or loyalty to clients.

Targeting the Right Segment

With so many potential client groups, it is crucial that the fund manager targets the right segment. They can do this through a process known as segmentation. Segmentation is the identification of subgroups of clients who share similar investment goals and liabilities, and thereby require similar investment products or mandates managed in a similar way. In this way, the fund manager can therefore break its customers down into smaller groups for easy management and aggregation into global investment performance standards (GIPS) product composites (see section on reporting).

Fund managers should have a comprehensive plan to undertake such segmentation. This should be developed by the marketing department and contain a description of the prospective clients, details about how they operate, a section on the key decision makers, marketing strategies, as well as an evaluation of competitors already with prospect and realistic target of the size of any potential mandate.

It should also be appreciated that pricing differences are rife between the various segments. Fees should be in a format that allows clients in each segment to compare competing providers. Indeed, all assumptions and differences should be clearly stated. This includes all the sources of client remuneration received by the manager and/or its affiliates, whether paid explicitly in fees or other charges or earned implicitly through income sharing, rebates or trading revenue. All these pricing structures should be presented in a full and fair manner.

In addition to targeting, fund managers should structure their business to minimise and manage conflicts of interest towards each segment. This includes procedures and systems in place to protect client confidentiality. Market sensitive information should be safeguarded from other operating areas of the firm and from external parties.

Reporting requirements also vary between clients. Different segments often expect different presentation and performance reporting formats. This is covered in a later chapter. Firms should consider having a dedicated team providing an exceptional service to each client segment. This team should be able to complete relevant documentation, keep efficient and detailed logs of all meetings and meet high service standards with all current clients, both institutional and private clients. In other words, the fund manager should ensure they are a client-facing organisation.

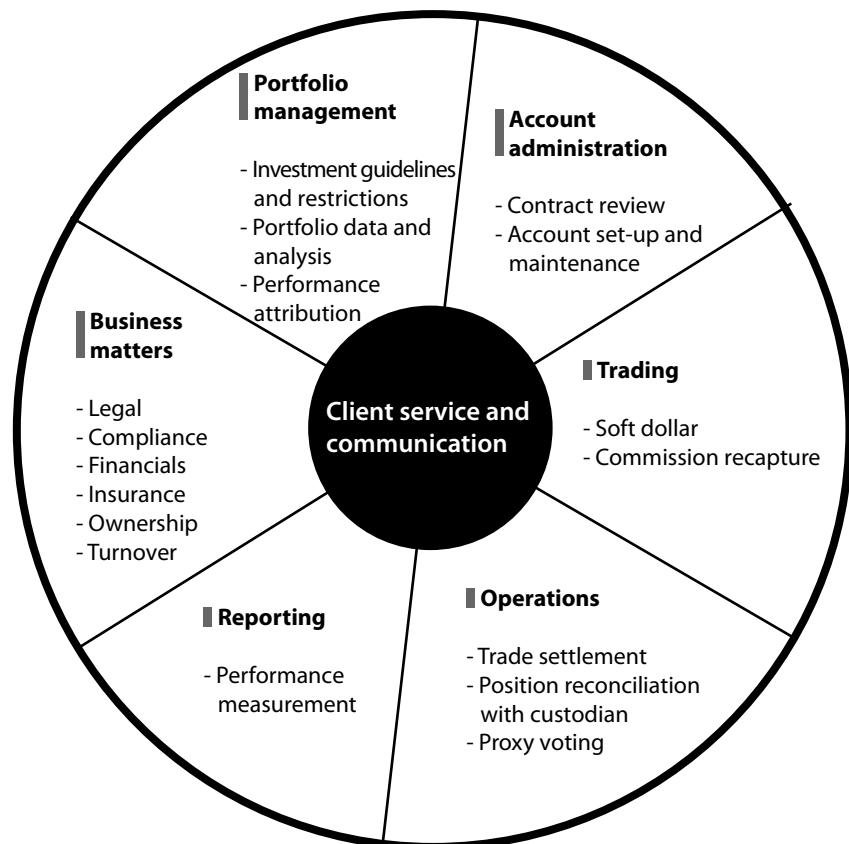
Ensuring a client facing organisation

Having a client-facing organisation is a business philosophy as much as an operational challenge. In essence, it is a strategy that places the customer at the heart of an organisation's processes, activities and culture. To achieve this, the fund management organisation should make available all the resources required to fully support and efficiently manage the investment process (to meet the client's objectives).

Building a client-facing organisation requires an in-depth understanding of the customer and the motivations and emotions that drive that customer to one fund manager as opposed to another. If the client awards a mandate only because a firm has the lowest fees, the firm's relationship cannot be said to be client facing. That sort of relationship would suggest the whole firm needs reorganising.

Organisational redesign is about making as many staff as possible become customer facing, and proactively anticipating their needs. Those who do not interact, add value and face the customer need to support those who do. Figure 3.1 illustrates those areas that need to be client facing.

Figure 3.1 A typical client facing fund manager



These days technology is essential to seamlessly tie such diverse departments together. Given the all-embracing nature of a client-facing organisation, putting together a robust technology solution involves more than simply installing software applications. As Figure 3.1 shows, information needs to be accessed from across the enterprise and, as such, systems should be linked. It should not be just an issue of linking front-office applications with back-office systems. The resultant output should satisfy client expectations and demands.

In order to ensure efficient fund management, many organisations purchase a mixture of technology applications from different vendors. The principal reason behind having such diverse solutions is that few software vendors are able to deliver all the functionality a fund manager requires.

An key client-specific piece of technology is customer relationship management (CRM) software. This allows the firm to identify, understand and better provide for customers. It is about understanding, anticipating and responding to customers' needs. The secret to an effective CRM package is not just in what data is collected, but in the organising and interpretation of that data.

Overview of Institutional Investors

The largest client groupings are within the broader category of “institutional investors”. An institutional investor is defined as a fiduciary entity that manages client assets with full investment discretion. The main categories are:

- ◆ banks and bank trust departments;
- ◆ insurance companies;
- ◆ investment companies (mutual fund families); and
- ◆ endowments, public and corporate pension funds and philanthropic foundations.

In addition to being institutional investors in their own right – such as on the proprietary trading side – banks often have their own mutual fund range, private wealth departments and fund managers. In addition, at the branch manager level, they can often manage client and trust funds. Insurance companies are also a large part of the institutional segment. Such companies invest their own property, casualty and life insurance funds. The last institutional investor category comprises university, private endowments, and philanthropic foundations. These can command quite substantial assets under management. Combined, they make a disparate clientele, but one that leaves plenty of room for specialisation. Table 3.1 presents a representative sample of some of the typical industry clients in the key geographies.

Table 3.1 Typical institutional clients

Europe and Middle East and Africa	US and Canada	Asia, Japan and Australia
ADIA	Alaska Airlines Inc	BHP Billiton
Barclays	AT&T Inc	Holden
Civil Aviation Authority	Bill and Melinda Gates Foundation Trust	IBM
Clifford Chance	Boeing	China Investment Corporation
Compass	Coca-Cola Bottling Co	Fuji Electric
General Motors	Shell Oil	Mitsubishi Electric
ING	Tiffany & Co	NEC

J Sainsbury	Unisys	Nomura Asset Management FOF
NSPCC	Viacom	Sekisui
Rank Xerox	Alcoa	Takeda Pharmaceutical
DeBeers	Federal Express	Tokyo Pharmaceutical Welfare
Natal Joint Municipal Funds	George Weston Ltd	Toshiba
IFAD	Government of Newfoundland	Toyota
Norges Bank	University of Western Ontario	Tokyo Electric Power
University of Cambridge		Temasek

The nature of the client base within the institutional space is changing. Many pension schemes and their investment advisers adopt best practice codes. Pension funds have seen the closure of defined benefits schemes in favour of defined contribution schemes. In the life insurance industry new products are being designed and priced in a more defensive manner. Their emphasis is now on affordable risk taking and on mandating fund strategies that can match the limited guarantees that were extended by them in the past. At the same time, institutions are outsourcing more and their internal processes are becoming increasingly professional.

These institutions are now having to adapt to the new post-credit crisis market environment. Insurance companies, for example, previously used economic capital models to determine their asset mix for their with-profit policies. These are now supplemented by market-based solvency tests. In a similar vein, pension funds also changed the way they view their asset/liability mix, prompted by the bear market of 2000–02. Prior to that, few pension funds applied mark-to-market valuations to both assets and liabilities. There was no real clear framework between fund managers and pension funds in their role as liability managers. As a result, mandate benchmarks were determined in an *ad hoc* manner. There is now much more thought put on this. The subsequent introduction of market-based solvency tests allowed pension funds and insurance companies to make clearer assessments of their overall risk.

Pension Funds

Pension funds are one of the most important clients for the fund management industry, representing over 80% of the OECD's GDP. The outsourced investment of pension assets is one of the core functions performed by the industry.

The US has a population of some 265 million people with a pension pool worth US\$3.76 trillion. Western Europe, with a larger population, has pension pools of only US\$1.61 trillion, while Japan has a pensions pool of US\$1.12 trillion. Clearly, at some stage, all these people will retire and will require an income. The opportunity is immense. Table 3.2 shows the top 10 pension funds.

Table 3.2 Top 10 pension funds

Source: The P&I 1,000, published January 21, 2008

Rank	Fund	Country	Total assets (US\$ millions)
1	Government Pension Investment	Japan	1,072,429
2	Government Pension	Norway	370,985
3	ABP	Netherlands	314,969
4	California Public Employees	US	254,627
5	National Pension	South Korea	231,966
6	Federal Retirement Thrift	US	223,338
7	California State Teachers	US	176,270
8	New York State Common	US	164,363
9	Local Government Officials ²	Japan	144,447
10	Florida State Board	US	142,519

There are two broad categories of pension fund:

- ◆ defined benefit (funded and unfunded); and
- ◆ defined contribution.

Defined contribution is growing strongly at the expense of defined benefit. As its name makes clear, in a defined contribution pension the member makes regular defined payments into the scheme. From a fund management perspective, this results in the regular funding of new or existing mandates. On the other hand, defined benefit plans can be either funded or unfunded.

In a funded plan, contributions from the employer, and sometimes also from plan members, are invested in a fund towards meeting the benefits. The future returns on the investments, and the future benefits to be paid, are not known in advance, so there is no guarantee that a given level of contributions will be enough to meet the benefits. In an unfunded defined benefit pension, no assets are set aside and the benefits are paid for by the employer or other pension sponsor as and when they are paid. As an aside, pension arrangements provided by the state in most countries in the world are unfunded, with benefits paid directly from taxes. As such, they do not fall within the remit of the professional fund management. Increasingly, this is changing as governments set up what is termed the three-pillar system.

- ◆ Pillar I: public, pay-as-you-go, usually defined benefit and redistributive.

- ◆ Pillar II: private, funded, almost always defined contribution.
- ◆ Pillar III: private, funded, voluntary, supplementary, preferably defined contribution.

Pillar III, in almost all variations, is voluntary, fully funded, and privately managed by fund management companies. As such, it is this third pillar that offers the greatest client opportunity to the industry. In some cases, such as in Chile and the UK, the third pillar is a part of the public system. In other cases, such as in the US, this third pillar complements the public system, but is separate from it.

In addition to the third pillar, the industry also obtains clients from company pension plans, other retirement savings vehicles (such as company-sponsored, tax-deferred retirement savings plans), individual retirement accounts and other retirement savings vehicles.

Whether they are third pillar or corporate, pension funds are an attractive source of clients for the industry. This is especially the case with defined contribution. In defined contribution plans, an employer agrees to contribute a fixed amount to an employee's pension fund each year. The income that the employee receives during retirement depends on how much money the plan accumulated and how much income that amount can generate. In the US, such schemes include 401(k) plans.

Like 401k plans, most pension schemes enjoy tax advantages, as they are designed to provide a salary to retirees. From a fund management perspective, this means they can offer mean-variance efficient portfolios (rather than, say, self-selected and concentrated stock portfolios). Such pension schemes are also attractive to the fund management industry because they have large assets pools, meaning that the mandate sizes are equally large. Likewise, they also have long time horizons, which allows for a more stable business relationship.

In order to provide adequate pensions, the fund management industry has to achieve real asset returns in relation to the growth of real wages. Ideally, returns should be at least 2–3% higher. In this respect, the fund management industry has to design products to meet these objectives, subject to the returns available in the market.

In recent years, pension funds have moved towards tailor-made asset and liability management strategies, termed liability-driven investment. The aim is to match and outperform a pension fund's liability stream while taking into account national taxation and regulatory issues. The key difference between this approach and traditional fund management is in the areas of inflation risk, interest rate risk, contribution risk and longevity risk. The change to such strategies represents a challenge as well as an opportunity for the fund management industry.

A good source of information on pension funds is contained in the annual publication *International Pension Funds and their Advisers*.

Investment Goals

The investment goals of pension funds vary depending on the type and maturity of plan itself. In the case of defined benefit plans, the goal of the investments is to generate the highest possible returns consistent with the

liabilities and liquidity needs of the pension plan, and in light of the risk tolerances of affected parties. In a defined contribution plan, the main goal of the investment function is to generate gains that accrue to individual member account balances in light of their investment goals.

Mature plans have to pay out pensions, and as such are more income-orientated. Young plans, in growing industries, have a higher appetite for riskier assets. Investment goals have to be tailored accordingly.

In order to better understand the investment goals of pension funds, fund managers should try their best to understand the asset/liability mix process. This is predicated on the fact that whenever a pension liability takes the form of future cash outflows (and the funds' assets earn interest), the funds' actuaries discount the interest liability before deciding whether or not assets are sufficient to cover the liability. The next step is the asset allocation, and only then the award of mandates.

The asset/liability mix process involves the development of a realistic picture of a funds' financial status, as opposed to an actuarial assessment. This involves discounting long-term liabilities at market yields using the risk-free rate and investment grade corporate bonds. The resultant trend for pension fund investment consultants to focus on risk budgeting has resulted in a shift away from equities and peer group benchmarks, towards customised liability-driven investing via cashflow matching and swaps.

The fund management industry must undertake the prudent management of pension fund assets so as to meet retirement income objectives and the aforementioned cashflow matching. Between 1999 and 2003, many pension funds went from significant surplus to significant deficit. A large number of investment mandates changed hands because the pension funds did not feel that their investment goals had been met. The winners of mandates were those fund managers who understood the shift to liability-driven investing.

Endowments and Foundations

Endowments and foundations are also a valuable source of institutional client for the fund management industry. They are generally well-funded philanthropic organisations established for non-profit purposes.

At inception, endowments and foundations are designed to dedicate their assets over the long term to their stated purposes. Essentially, a fund is created to provide a permanent source of support to be used for charitable purposes. The principal or value of the fund is never spent. The size of such vehicles can be as small as US\$100,000 to tens of billions of US dollars. The top 10 foundations in the world are shown in Table 3.3.

Table 3.3 Top 10 foundations

Source: Wikipedia 2010

	Foundation	Country	US\$ billion
1	Stichting INGKA Foundation	Netherlands	36
2	Bill and Melinda Gates Foundation	US	35.1
3	Wellcome Trust	UK	26.4
4	Howard Hughes Medical Institute	US	18.6

5	Ford Foundation	US	13.7
6	The Church Commissioners for England	UK	10.5
7	J. Paul Getty Trust	US	10.1
8	Li Ka Shing Foundation	Hong Kong	10.1
9	Robert Wood Johnson Foundation	US	10.0
9	Mohammed bin Rashid Al Maktoum Foundation	United Arab Emirates	10.0
10	William and Flora Hewlett Foundation	US	8.5

As can be seen from Table 3.3, many foundations are gifted by wealthy individuals and/or are the product of former corporate ownership. The largest are usually termed true endowments. In this respect, there are the three types of endowments:

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- ◆ true endowments: these are funds received from external donors with the restriction that the principal is to be retained in perpetuity and cannot be spent;
 - ◆ term endowments: these are similar to true endowments, except that all or part of the principal may be used after a stated period of time or on the occurrence of a certain event; and
 - ◆ quasi-endowment: these funds function as endowments or fund a foundation, rather than a donor or other external agency, and have determined to treat the fund as permanent capital although there is no legal obligation to do so.
-

More recently, foundations have tended to be more innovative with their asset allocation than pension funds. Their social mission and often small managerial structure allows them more flexibility.

Tax efficiency is also resulting in an increase in money gifted to endowments, and indeed in new ones being formed. This is because endowments are tax efficient for higher-rate taxpayers.

Investment Goals

The investment goals of a foundation or endowment can be broken down into three variables that show the amount of financial risk that must be taken to achieve the institution's goals. These variables are:

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- ◆ a targeted rate of asset growth relative to inflation (or the real growth rate);
 - ◆ the spending policy of the foundation or endowment; and
 - ◆ fund raising or new dollars contributed into the endowment pool.
-

In other words, the investment goals depend on what is required from the assets to meet the mission of the institution. The most important of these parameters is its real growth target, or the asset growth adjusted for inflation over time. As a result of this, many mature foundations and endowments target zero real growth over time. Newer foundations and endowments, and those with aggressive expansion plans, may have much more ambitious growth aspirations but rely more heavily on gifted income.

Regardless of the size of the asset pool, how a foundation or endowment spends its income or assets will play a large role in determining an appropriate investment strategy for the fund's assets. All else being equal, the more a foundation or endowment spends, the more aggressive its investment goals must be to achieve real growth objectives over time. An assessment of spending policy includes the spending method, the spending amount and other provisions that may be important, such as large irregular withdrawals and tolerance for variability of spending. Again, all else being equal, the more funds an institution raises outside of the investment pool, the less aggressive the investment pool must be to target the fund's growth objectives over time.

Insurance Companies

There are several major types of insurance companies, and all require fund management, be it internal or external. Some companies offer the entire suite of insurance, while others specialise in one of three specific areas:

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- ◆ life insurance: insurance guaranteeing a specific sum of money to a designated beneficiary upon the death of the insured, or to the insured if they live beyond a certain age;
 - ◆ health insurance: insurance against expenses incurred through illness of the insured; and
 - ◆ liability insurance: the miscellaneous category – this insures property such as automobiles, property and professional/business mishaps.
-

Insurance companies' capital is provided for the potential liability that it insures. As a result, it is invested.

The complexity of the life insurance business is such that specially adopted techniques are essential. A life insurance company must adopt a long-range outlook on its fund management goals since the earnings on any block of policies are not known until the period of the contract has expired.

Demographics play one of the largest roles in affecting sales for insurance, particularly life insurance. As people age, they tend to rely more and more on life insurance products for their retirement. The different variety of policyholder options determines the insurance companies' investment profile. In this respect, the key options that can change are:

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- ◆ flexible premium options;
 - ◆ the option to change investment basis, such as a change from equity to debt investments;
 - ◆ surrender value guarantees;
 - ◆ events effecting guarantees;
 - ◆ death benefit amount guarantee;

- ◆ cash-out option at predetermined age or duration;
- ◆ guaranteed value in case of other contingent events, such as disability;
- ◆ guaranteed minimum surrender value;
- ◆ acceleration of death benefits for terminal illnesses; and
- ◆ deferral of cash payment on withdrawal of account value.

The insurance industry is becoming highly competitive. As a result, insurance has become more like a commodity. Insurance companies therefore have a tendency to use higher investment returns, and a variety of insurance investment products, to win customers.

It is difficult to get an exact figure for the assets under management of insurance companies, an industry representing 11% of global financial assets, because of the difficulty of determining the reserve status of the life funds. Also, many insurance companies own fund managers that run money for third parties, as is the case at AXA, where its subsidiaries have approximately US\$540 billion in assets under management, most of it at Alliance-Bernstein. As such, the list of top 10 insurance companies in Table 3.4 is based on their market value. Their potential assets under management could well be 10 times that number.

Table 3.4 Top 10 insurance companies

Source: Wikipedia 2010

		Country	Market value
1	American International Group (AIG)	US	US\$172.24 billion
2	AXA Group	France	US\$66.12 billion
3	Allianz Worldwide	Germany	US\$65.55 billion
4	Manulife Financial	Canada	US\$50.52 billion
5	Generali Group	Italy	US\$45.45 billion
6	Prudential Financial	US	US\$39.70 billion
7	MetLife	US	US\$37.94 billion
8	Aviva	UK	US\$33.10 billion
9	Munich Re Group	Germany	US\$30.99 billion
10	AEGON	Netherlands	US\$26.40 billion

Investment Goals

The investment goals of the insurance industry are often driven by the corporate metrics of the firms themselves. Insurance companies excel at creating tailored liabilities, taking individual risks away and pooling them. The key metrics to focus on from an investment goal perspective are therefore the insurance company's return on equity (ROE) and return on assets (ROA).

$$\text{ROE: } \frac{\text{Net income}}{\text{Shareholder's equity}}$$

ROE indicates the return a company is generating on the owners' investments. In the policyholder owned case, you would use policyholders' surpluses as the denominator. As a general rule for insurance companies, ROE should lie around 10–15%.

$$\text{ROA: } \frac{\text{Net income} + \text{Interest expense}}{\text{Total assets}}$$

ROA indicates the return a company is generating on the firm's investments/assets. In general, a life insurer should have an ROA that falls in the 0.5–1% range. The insurance industry average return is approximately 3%. The premium income and investment income, the numerator, should therefore be taken into account when evaluating such companies.

Clearly, interest rate fluctuations affect the performance of an insurance industry's returns. Declining interest rates usually equate to slower investment income growth.

Life policies have a savings element consisting of the increase in the present value of the future benefits in excess of the future premiums. Such products include a predetermined surrender value, which creates significant cashflow risks. Modern products with a high savings element introduce a much greater variety and degree of risk for the fund management element than existed for traditional life insurance.

Although the insurance industries funds are tied to its corporate metrics, they require professional long-term fund management as much as the other institutions. That said, they tend to outsource less and prefer instead to seek third-party assets that they can manage themselves.

Private Investors

Private investors tend to have smaller pools of assets than institutions but make up the largest number of clients for the fund management industry. Indeed, the market for managing private client assets has expanded rapidly with globalisation and the rise of the middle class. The growth in the number of wealthy individuals is creating substantial opportunities for a wide range of asset managers that provide services to this niche.

The private investor market breaks down into four broad categories:

- ◆ ultra high net-worth individuals, defined as those possessing more than US\$30 million of investable assets;
- ◆ very high net-worth individuals, with more than US\$5 million assets;
- ◆ high net-worth individuals, with more than US\$1 million assets; and

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- ◆ the mass affluent, with assets exceeding US\$100,000.
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The fund management industry tends to focus on bespoke management for the ultra and very high net-worth individuals, and for retail solutions for the other segments.

It has been observed that there are a number of things a fund manager has to do in order to be effective in managing private wealth. Managing the relationship and the construction of the optimal portfolio is important. The insert shows the factors that have to be taken into account by fund managers. As can be seen, many of these are very personal issues and have to be addressed firmly but with professionalism and respect.

Obviously, individuals are taxable in many different ways, providing an added layer of complexity for fund managers. Some of the factors/assets that fund managers have to take into account are:

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- ◆ residence;
 - ◆ other property, such as a second home;
 - ◆ an investment portfolio;
 - ◆ investment in private companies;
 - ◆ bank/building society deposits;
 - ◆ life policies (surrender value and/or death value);
 - ◆ pensions; and
 - ◆ share options.
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Asset location is also important. This is why so many private fund managers have offshore offices. The private wealth market tends to concentrate on certain such jurisdictions; Switzerland remains the world leader, managing about a third of Europe's wealth.

Many ultra high net worth individuals have set up their own "family offices" to administer their fund management requirements. These employ specialists in investments, accounting and law to manage financial interests on a full-time basis. Often, such family offices have other miscellaneous responsibilities such as real estate management, travel booking and even entertainment.

A single-family office is dedicated to just one family, while a multi-family office serves several. The trend is unlikely to prove a threat to the fund management industry. In fact, it could be seen as a further layer of distribution and, in this respect, tends to promote the services of smaller, boutique fund managers.

From a fund management perspective, the management of private wealth is very resource intensive, limiting the economies of scale. As a result, many fund managers introduce a minimum threshold wealth level and direct smaller clients to retail or fund of fund products. This is obviously not a problem for the wealthiest individuals (a list of the 10 largest is shown in Table 3.5).

Table 3.5 Top 10 wealthiest individuals*Source: Forbes 2010*

1	Carlos Slim Helu and family	Mexico	US\$53.5 billion
2	William Gates III	US	US\$53.0 billion
3	Warren Buffett	US	US\$47.0 billion
4	Mukesh Ambani	India	US\$29.0 billion
5	Lakshmi Mittal	India	US\$28.7 billion
6	Lawrence Ellison	US	US\$28.0 billion
7	Bernard Arnault	France	US\$27.5 billion
8	Eike Batista	Brazil	US\$27.0 billion
9	Amancio Ortega	Spain	US\$25.0 billion
10	Karl Albrecht	Germany	US\$23.5 billion

Investment Goals

Private wealth investment goals are complex, and both taxation and personal financial planning come to the fore. There are, however, four broad classifications that the goals fall into:

- ◆ capital preservation – minimising the risk of real loss;
- ◆ capital appreciation – growth of the portfolio in real terms to meet future need;
- ◆ current income – the focus is in generating income rather than capital gains; and
- ◆ total return – increasing portfolio value by capital gains and by reinvesting current income.

It is important for the fund manager to understand that liquidity needs vary between investors depending upon age, employment and tax status. Indeed, unforeseen liquidity issues can arise, such as a divorce or a major health crisis. The time horizon can also influence liquidity needs and risk tolerance.

Most successful private wealth fund managers work closely with property, legal and accountancy firms. These relationships allow the fund manager to better:

- ◆ evaluate the tax efficiency of an investment asset within the wider context of suitability for an individual customer;
- ◆ know the key features of onshore and offshore trusts;
- ◆ understand the liability to inheritance tax, and the effects on inheritance tax liability of chargeable lifetime transfers and transfers on death;
- ◆ understand the principles of capital gains tax, and when and how it arises;
- ◆ understand the rules governing the administration of estates, grant of

- probate and registration of probate;
- ◆ understand the tax treatment of different kinds of investments and the taxation of income arising on investments; and
- ◆ understand the tax treatment of onshore and offshore funds.

In order to help the private client better understand his investment goals, fund managers should prepare a client profile in line with “know your customer” principles. This should show a clear relationship between the information elicited and the formulation of appropriate customer-led objectives and constraints.

Once the investment goals have been formulated, the fund manager should individually identify, analyse and select suitable investments in order to construct a portfolio tailored to meet the individual.

Sovereign Wealth Fund

Sovereign wealth funds are funds set up by governments. They are becoming increasingly important; in 2010 they were managing assets worth US\$3.5 trillion worldwide. Indeed, as resource rich countries develop they are allocating more funds into these strategic reserves funds.

There are an estimated 45–50 sovereign wealth funds. They contribute to the economic development of their home countries. They are often designed to protect economies from volatility in commodity markets, improve the risk–return profile of government-controlled portfolios and help boost financial and fiscal management capacities.

As mentioned, Adia is the largest sovereign wealth fund, with US\$900 billion worth of assets under management, while the Singapore Investment Corporation is a distant second with assets worth US\$330 billion and Norway’s Government Pension Fund is third with US\$322 billion in assets. The Middle East, and oil-rich countries in general, have a number of such funds. Saudi Arabia’s various funds have assets worth US\$300 billion under management, Kuwait Investment Authority has US\$250 billion, Libya Oil Reserve Fund has US\$100 billion, Qatar Investment Authority has US\$60 billion and Iran’s Foreign Exchange Reserve Fund totals US\$15 billion.

However, sovereign wealth funds have been notorious for their lack of transparency. There is no justification for this and it is recommended that they should be established along the lines of best practice. Disclosure of investment policy actions is the first step in assuring such accountability. In addition, fund managers of sovereign wealth should:

- ◆ ensure that they adequately disclose investment policy actions (eg, through press releases, annual reports or reports to parliament), while also protecting commercially sensitive and classified information;
- ◆ establish investment policies on investments designed to protect national security;
- ◆ establish procedures for parliamentary oversight, judicial review and periodic regulatory impact assessments; and
- ◆ ensure that decisions to interfere with the investment process at high government levels should be only undertaken in accordance with accountability of the implementing authorities.

Sovereign wealth funds should be making investments using portfolio techniques that are rigorous, but that reflect the country's circumstances, institutions and resources. In determining the investment goals, the relationship between investment restrictions and national security risks should be clear.

Investment Goals

The main objectives of sovereign wealth funds are varied. They are determined by national statute, but tend to focus on:

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- ◆ creating new industries and developing in-country expertise;
 - ◆ economic diversification;
 - ◆ economic stabilisation;
 - ◆ generational pension provision;
 - ◆ professional fund management; and
 - ◆ wealth preservation.
-

The investment goals of sovereign wealth funds are as varied as their political objectives. That said, most have long-term benchmarks; indeed, about one in two sovereign wealth funds invest in private equity and real estate, both long-term and illiquid asset classes.

Although absolute return does not make much sense for a sovereign wealth fund (because a sovereign can impact the real value of money), sovereign wealth funds have been increasingly investing in alternative assets. Indeed, there was a rethink of return strategies in the Middle East after the losses that were made investing into Western banks at the height of the credit crisis.

In order to achieve their goals, the investment restrictions of sovereign wealth funds should be narrowly focused on national security alone. Indeed, where security-related investment takes place, measures should be designed so that decisions benefit from adequate expertise as well as with respect to the benefits of open investment policies and the impact of restrictions. If used at all, restrictive investment measures should be tailored to the specific risks posed by investments. Policy measures, especially risk mitigation agreements, and any restrictive measures should be established at the outset in a client investment policy statement.

Establishing a Client Investment Policy Statement

Fund managers should work with clients to establish a written statement and overall investment policy (where it does not already exist). This helps establish terms of reference for the investment mandate and enables constraints, such as risk limits or restricted stocks, to be put in place. In order to be effective, such a policy should:

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- ◆ clearly state the index and any statistical measures, such as tracking error;
 - ◆ establish clear investment objectives;
 - ◆ be consistent with the objectives of the client;
 - ◆ reflect the liabilities and acceptable degree of risk; and
 - ◆ satisfy the prudent person standard, taking into account the need for proper diversification and risk management, the maturity of the

obligations and the liquidity needs, and any specific legal limitations on portfolio allocation.

The investment policy shows the fund manager how the client determines its strategic asset allocation strategy, and therefore sets the tone for the overall performance. The document also gives guidance on what the client should expect in terms of monitoring and, when necessary, modifying allocations and performance objectives in the light of changing liabilities and market conditions.

Jointly preparing an investment policy with a client helps keep expectations in check. It is a good idea, in this respect, to include any broad decisions regarding tactical asset allocation, security selection and trade execution that may crop up during the mandate's life. Such policies are central to ensuring a good relationship between the client and the fund manager. The client relationship manager should discuss the investment policy statement with the portfolio managers and risk team. Indeed, it is at this point that the risk management process begins. It should be used as a tool to appropriately set control portfolio risk and to manage the assets and liabilities in a coherent and integrated manner.

It is always a good idea to have as many points of contact with the client as possible. All too often, fund managers just have one or two key contact persons. This is dangerous; it is suggested that fund managers should ensure that they are aware of all the parties who are responsible for the overall implementation of the investments as well as the back-office contacts. The investment policy can help in this by identifying the key responsible individuals on the client side.

It is never nice to lose a client, but the risk is mitigated if the investment policy states the procedures and criteria by which the client periodically reviews the effectiveness of their investment policy, and determines whether there is a need to change managers, the policy or its implementation procedures.

In framing the investment policy statement, new concepts and ideas should be considered. For example, there is an emerging view that institutions have given too much emphasis to short-term returns at the expense of corporate accountability. Among those who call for greater responsibility include the United Nations-backed Principles for Responsible Investment Initiative (PRI), the National Association of Pension Funds (NAPF) and the Association of British Insurers (ABI). These types of issues can only be tackled at the investment policy level.

Safeguarding Client Assets

In addition to setting the investment policy, fund managers should establish a proper, transparent and disclosed basis for both safeguarding and valuing client assets. This is not only because of their fiduciary responsibility, but also because the many scandals of the past have soured the trust between clients and the industry. A number of issues need to be taken into account:

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- ◆ asset safety;
 - ◆ counterparty risk minimisation;

- ◆ services required;
 - ◆ locations to be serviced;
 - ◆ reporting requirements;
 - ◆ systems and communications; and
 - ◆ cost.
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These days a custodian acts as a third-party watchdog responsible for protecting investors' assets from any illegal activities of the fund manager. The custodian holds the clients assets and should be in a position to ensure their safekeeping. That said, the fund manager should ensure the custodian is secure enough and refuse to work with names they do not recognise or have not done due diligence on.

Often custodians provide additional services such as securities lending, cash management, investment accounting and reporting, and performance measurement. In such instances, they act as a reconciliation service between the clients, the fund managers and their own records. The Bernard Madoff scandal showed that it is highly risky to have the custodian acting as the administrator as well. This is because the administrator should play the external whistle-blowing function similar to that of the auditor with respect to the investment of the assets by the fund manager.

The bottom line is that a custodian prevents the client from losing their money if the fund manager goes bankrupt. As such, it does not allow the fund to include investor's monies with other company assets. If the fund is dissolved, the custodian bank is responsible for returning funds to investors.

Clearly, all clients assets held by the custodian should be valued for accounting, reporting, actuarial and funding purposes. It is best to do this at arm's length with an independent administrator. Ideally, permitted valuation methodologies for these purposes should be consistent and, where inconsistent, the differences in methodologies should be transparent.

Valuation of clients' funds should be at current market value or under a fair valuation methodology. Where this is not possible, it is suggested that the valuation be accompanied by the disclosure of the results that would have been obtained using a current market value or fair valuation methodology. Special methods may be needed to value funds that consist of securities in less liquid markets and assets such as real estate. Specific methodologies for valuing such assets should, as far as possible, take into account the risk inherent to illiquid markets and have a predefined protocol.

The most crucial thing for the methodology used for valuing client assets should be that it is transparent to both the client and all others involved in the fund management process. This is especially important due to the administrative complexity involved, the size of the assets and the many new and complex financial instruments that now exist. The growing size and international spread of fund management has made the task of those responsible for the security and administration of financial assets immensely more complicated. It is no longer good enough to deliver excellence in fund management – firms must also safeguard client's assets.

Conclusion

The fund management industry's client base is large, complex and fragmented. That said, they are the lifeblood of the industry and their requirements have to be met in order that individual fund management firms succeed. Increasingly, however, these clients are being targeted by competition from structured products and bank deposits, especially in countries where banks are the main distribution channels for savings products. The industry has to evolve to face that challenge. Institutions, meanwhile, are increasingly relying on a whole industry of evolving intermediaries to distribute product.

To address the increased competition, this chapter suggested that a fund manager should do all it can to position itself as a specialist towards its particular client grouping. The idea of having dedicated business development officers for each different segment was presented. It also pointed out that innovation continues to evolve and find new solutions to address such challenges.

In addition, the chapter showed that client investment goals are complex and changing. Cross-border asset allocation, for example, will grow disproportionately as a product of the search by institutional investors for efficient portfolios through international diversification. Liability-driven investment was also shown to be increasingly important.

The client world is split between private clients and institutions. Stringent suitability tests are required for the former. The rules and regulations behind these are explained in more depth in the next chapter.

Panel 3.2 Case Study: Blackrock Global Investors

THE WORLD'S LARGEST ASSET MANAGER'S APPROACH TO CLIENT SOLUTIONS

In June 2009, BlackRock acquired Barclays Global Investors (BGI). The transaction created an independent and fully integrated asset management firm – named BlackRock Global Investors – with combined assets under management of over US\$2.7 trillion, bringing together market leaders in active and index strategies.

Clearly, addressing client solutions in such a large organisation requires a dedicated approach. BlackRock's multi-asset client solutions team is the firm's answer to this. The team was created to develop and manage investment solutions involving multiple strategies and asset classes. The dedicated team includes more than 130 portfolio managers, quantitative analysts, investment strategists, research analysts, economists and actuaries.

The central idea of a client solutions team is to partner with clients to solve their investment and liability challenges by understanding their objectives, advising on solutions and designing and implementing strategies that meet or exceed goals.

Now firmly established, BlackRock's client strategy team provides advice on investment strategies to pension plans, insurance companies, endowments and foundations, central banks and other institutional investors. It also works closely with clients and their consultants

to develop tailored solutions designed to meet their specific investment needs. The team also capitalises on the new trends mentioned in this chapter, specialising, for example, in designing liability-driven investment solutions and asset allocation strategies. Such a team can also provide educational opportunities and briefings to help clients make informed risk-budgeting decisions.

4

Legal and Regulatory Landscape

“Markets serve an important public interest, and deserve public oversight; but markets are also innovative and fast moving, and easily stifled by the heavy hand of government.” *Former SEC Chairman Arthur Levit*

The fund management industry has far more legal bureaucracy than most outsiders would imagine. Although the industry has a high degree of “self-regulation”, it is subject to national and even international law, which creates a minefield of jurisdictional overlap. It means that a multitude of rules and regulations involve the domicile of the manager, its funds and its clients. Adhering to these is not only a legal obligation, it is also the right thing to do.

Sound governance is the building block of both good organisational management and the legal and regulatory landscape. Regulatory bodies are very focused on the effective governance of firms within their supervisory remit. The spectrum of regulations covering this includes regulatory capital related issues, authorisation, reporting, market abuse, conflicts of interest, treating customers fairly and conduct of business issues. Although there is a lot to do to adhere to these regulations, the most important thing senior management have to implement is:

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- ◆ an environment where the firm can work efficiently and effectively;
 - ◆ systems and procedures whereby the use of information and knowledge in the firm is effectively, efficiently and ethically utilised; and
 - ◆ a mindset whereby staff carry out tasks with due regard to the organisation’s policies and procedures.
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In establishing such a framework, it should be understood that the boundaries of risk management and regulation are becoming increasingly blurred. This is unsurprising given that much of the regulations in place are about managing risk in some way or another. Firms are addressing this more and

more by focusing on their operational as well as their broader risks. This means regularly having to address their risk appetite and the effectiveness of their controls. That said, compliance has become accepted as more than a cost of business, it is now viewed as a sign of good business practice.

Compliance has also, however, become increasingly costly and complex. The expansion in the use of derivatives and the increasing complexity of products offered to investors require more sophisticated controls over investment risk and internal operations than was the case in the past. Compliance is also increasingly encompassing ethical questions, such as whether products are appropriate for the customers they are sold to.

In order for compliance departments to be effective, the implementation of the rules requires efficient legal, and technological resources. Indeed, to navigate the legal and regulatory landscape requires fund managers to establish clear, detailed procedures. These not only involve the internal process but also things like contract drafting and interpretation.

It should be noted that it is not just national regulation that fund managers have to worry about. There is an increasing level of regulatory oversight from various international bodies, such as the Basel Committee, the International Organisation of Securities Commissions and the International Association of Insurance Supervisors. These organisations typically agree standards that are then adapted and applied to local markets.

As a result of the credit crisis of 2007–09, there is now a greater focus on systemic risk at larger fund managers. These firms now have to ensure that all their financial activities that could potentially pose systemic risks are appropriately overseen. In this respect, systemic significance effectively means “the scope for failure to cause disruption to key financial markets and loss of confidence as well as interconnectedness and size”. In practice, this means that firms should take account of leverage and funding mismatches in more complex financial products, whether it be products they create or products that they include in their portfolios.

We assume (and hope) that most firms are on top of their domestic regulations. As a result, the biggest legal and regulatory hurdles should come into play when firms market across borders. When doing this, fund managers have to overcome home country bias and culture issues as well as the paperwork. A good understanding of the Anglo Saxon and European regulatory environment is a first step to ensure that all the issues are covered. It is this approach that this chapter will focus on, and the first thing for the reader to understand is the top-down distinction between rules- and principles-based regulation.

Rules- Versus Principles-Based Regulation

In addition to an obvious difference in rules and regulations, there is a philosophical divide between the US and European regulatory systems. Any manager that wants to be global has to understand this and adapt to the differing nature of these two systems. In this respect, the US is rules based and Europe is principles based. To distinguish between them:

- ◆ rules-based regulations are, as the name implies, based on rigid adherence to written rules – this is typical of the US approach:
- ◆ principles-based regulations are where firms are under a constant

obligation to conform their business practices with the regulators' principles and high-level rules - this is typical of the UK approach.

The principles-based focus is more on outcomes that should be delivered in the real world. For example, principles are better at ensuring customers are being treated fairly, that conflicts of interest are being managed appropriately and financial instruments being valued fairly and in accordance with a firm's policies.

Rules- and principles-based regulation of fund management is not new. The requirement that advice on investments must be suitable for a client is a pillar of the industry. That said, something as simple as the word "suitable" is not defined within the industry. What is required to ensure suitability is something that firms need to decide in each case. In other words, firms should decide in the light of circumstances of their clients and of the products being advised upon. In this respect, principles-based regulation arguably gives greater flexibility for innovation.

Despite the different philosophies, both approaches have an equally cumbersome amount of paperwork that has to be processed by dedicated compliance and legal departments. It is necessary to be up to date on these in order to be successful. Regardless of approach, the regulatory trade-offs that are made illustrate the challenges faced by senior management at fund management firms.

Regulatory Trade-Offs

The rules versus principles trade-off is only one of many that the industry faces. Regulators of the fund management industry have multiple objectives and, as such, have a number of these regulatory trade-offs. These occur in many areas, such as:

- ◆ safety and soundness, which involves capital adequacy rules and oversight, early intervention and resolution, on-site inspections, investor protection, capital market controls, clearance and settlement of market transactions;
- ◆ competitiveness, which involves covering new start-ups, permissible functions, permissible geographic locations and mergers and acquisitions;
- ◆ fairness of customer treatment, which involves avoiding being too prescriptive for the client, terms of business, dispute resolution and the non-discriminatory availability of services;
- ◆ disclosure and reporting, which involves covering accounting policies, balance sheet valuation techniques, content and format of regular reports, special reports and event disclosure;
- ◆ avoidance of conflicts and abuses, which involves covering treatment of fiduciary standards and avoidance of conflicts of interest, improper self-dealing, tie-in practices and insider abuses;
- ◆ allocation preferences, which involves trade monitoring and multiple accounts; and
- ◆ monetary management, which involves covering elements of internal control.

It is incumbent on fund managers to have policies and procedures that address these areas. Because these trade-offs often conflict, there needs to be a means for explicit and open resolution of conflicting objectives within the firm's architecture. After all, regulatory actions and accounting rules can affect the efficiency and dynamics of fund managers. In addition, regulation can hamper market development by imposing constraints on the activities of institutional fund managers. It is far better for firms to address this themselves than have change or new rules imposed on them. Self-regulation is always, in the opinion of the author, preferable to government regulation.

Self-Regulation Versus Government Regulation

The biggest trade-off that has to be addressed at the 20,000 ft level in the fund management industry is between self-regulation and government regulation. Regulating investment can constrain returns and inappropriately match assets with liabilities. As a result, it is not surprising to hear that the dominant mantra in the industry is self-regulation.

It is interesting to note that self-regulation preceded the era of top-down regulation. When the industry began, fund managers had unlimited liability. If something went wrong, the fund managers were individually liable. That tended to focus the mind. In those days, the concept of *dictum meum pactum* (my word is my bond) was considered enough to ensure that clients' interests came first. Now, there are very few fund management partnerships. One such firm is Baillie Gifford. It has built its success around the stability of its partnership structure. It believes this provides reassurance to its clients and motivation for employees. As at December 31, 2009, the partnership managed more than US\$90 billion.

As limited liability took hold, the industry evolved a number of approaches that addressed the need to set the highest standards. The key elements of these are:

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- ◆ a code of ethics;
 - ◆ a complaints process;
 - ◆ general practice standards;
 - ◆ practice standards for supervision;
 - ◆ continuing professional development (CPD); and
 - ◆ accredited status (often by examination).
-

Today, a number of bodies provide these elements at an industry level. In addition to the regulators and various buy-side trade organisations, these include the CFA Institute and the European Federation of Financial Analysts Societies (EFFAS).

The advantage of self-regulation in a complex industry with rapid product innovation is that it is better at identifying abuse. The downside of self-regulation is that it does not have the rule of law behind it. Most countries now practice a hybrid of the two. It should be remembered that regulation is in place to protect investors. Every scandal, financial fraud, or even bear market, results in new regulation. Politicians like to be seen coming to the defence of the exploited investor. As a result, the concept of *caveat emptor* (buyer beware) has largely been relegated in the world of professional investors.

Self-regulation works because of an alignment of interests with client. The customer does not want to be cheated or forced to make poor investment decisions. As a result, in theory, the clients are attracted to the firms with the highest standards. In other words, clients are attracted to those that self regulate. It should not be forgotten, therefore, that the primary responsibility for self-regulation remains where it has always belonged, with each firm's senior management. Maintaining and operating adequate compliance functions and procedures should therefore be at the top of management's list of concerns.

How to Operate and Maintain Adequate Compliance Functions and Procedures

The key conclusion of self-regulation is that it is important to operate and maintain adequate compliance functions and procedures to the highest standard. No matter what organisational structure is chosen, reporting lines and functions for the compliance department should be defined clearly in writing. It is now considered best practice to separate the compliance department functions from the supervisory functions of line managers. Indeed, firms should even consider giving the compliance officer authority to rebuke the chief executive officer (CEO).

In addition to addressing the reporting lines of a compliance officer or their department, it also makes sense to distinguish between the roles of the compliance department from other control functions. A compliance department should know and understand:

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- ◆ how the relevant regulatory requirements affect the company;
 - ◆ what the organisation's policies and procedures are for ensuring regulatory requirements;
 - ◆ when to provide clarification of the regulatory requirements;
 - ◆ when to recognise non-compliance and the consequences of non-compliance for the organisation;
 - ◆ how the organisation and its customers inter-relate;
 - ◆ the process for non-compliance with regulatory requirements; and
 - ◆ how to develop the organisation's requirements relating to the application of codes, laws and regulatory dictates.
-

Given differences in resources, business activities and management structure, the role and organisational structure of a compliance department is likely to differ depending on the size of the firm. In particular, smaller firms may have simpler business structures.

Regardless of resources, the compliance department should operate and maintain compliance procedures and practices to ensure that staff do not breach any laws, regulations, determinations or rules. When such breaches are discovered by a registered firm, they should be reported promptly. While the firm and its compliance department cover every aspect of regulation, clearly individuals might inadvertently fail to comply. As such, there is also a guidance role that needs to be understood.

As far as guidance goes it is good practice to ensure that all relevant members of staff are aware of the compliance requirements and are suitably kept up to date on any significant changes. Firms are generally required to make an annual compliance report to the regulator. This is fairly straightforward, but regulators are really looking to see that a number of key concepts are be-

ing upheld, and that all involved understand the key regulatory concepts.

Understanding the Key Regulatory Concepts

Understanding the key concepts behind the regulatory framework is essential for senior officers in the fund management industry. While rules and procedures differ from country to country, the main concepts are generally based on the same issues, which can be summarised as follows:

- ◆ integrity;
- ◆ skill, care and diligence;
- ◆ fiduciary responsibility;
- ◆ prudence;
- ◆ market conduct;
- ◆ money laundering;
- ◆ Chinese walls; and
- ◆ fit and proper persons.

One of the central issues is that, regardless of the type of client, the fund manager must always act with integrity, with skill and care and as a fiduciary. Being fiduciary is all about putting the client's interests and assets first. Indeed, there is much press coverage on the perceived decline in the fiduciary oversight at fund managers. In reality, the financial markets have become more transparent over the years. The increase in lapses may merely represent an increase in self-reporting. That said, the advent of hedge funds did make the industry less transparent and more opaque, and it is now incumbent on the industry to get back on track.

In order to put clients first, one of the questions a fund manager should ask is whether they are communicating the range of outcomes of their products clearly and comprehensibly. They should avoid mismatches between the performance characteristics and the risk appetites of products. In other words, they should act with prudence and professionalism. They should observe good market conduct, with adequate Chinese walls against such things as money laundering. In short, it is all about integrity.

Integrity

Integrity is one of the most important values for a firm or an individual to have in fund management. According to the dictionary, integrity is a steadfast adherence to a strict moral or ethical code. This means fund managers should have moral soundness and be honest with clients. Integrity is doing the right thing, even if nobody is watching. When managing other people's money, it is a precondition. Unfortunately, the fund management industry is perceived by some to be lacking in integrity. This is where best practice and standards come into their own – they reinforce, or even restore, trust, an issue that has to be addressed by each and every firm.

In order to ensure integrity permeates an organisation, it is necessary to structure the firm so that corrupting influence or motives are not likely to impact the management of client assets. This includes the fulfilment of fund objectives, the discharge of duties and the management of mandates. These must all be executed with a focus on total quality management, especially in the key areas of:

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- ◆ compliance;
 - ◆ conflict of interest;
 - ◆ business practice;
 - ◆ disclosure;
 - ◆ risk management;
 - ◆ management of investment;
 - ◆ trading and execution; and
 - ◆ valuation of assets.
-

It is difficult to regulate integrity into law, however its importance can be recognised, and from a management perspective, it can be put in place from the top down. In the UK, integrity is even written into the rulebook. FSA principles state that, “A firm must conduct its business with integrity”.

Integrity and trust cannot be separated. Trust is an incredibly precious commodity. It is always the first casualty of poor execution. A breakdown in trust can severely damage relationships between fund managers and their clients. Attention should be paid constantly to how the whole firm addresses such issues, from senior management down. A good guide to ensuring this is done is to take a look at the “breaches” book to see how many self-reported breaches of the rules are being made. Mistakes happen and this is a good way to see if they are being covered up or not.

Integrity is about owning up to such things and “sorting it out”, not sweeping problems under the carpet. This requires skill, care and diligence.

Skill, Care and Diligence

In the same vein as integrity, a firm must conduct its business with due skill, care and diligence. This may sound obvious, but all too often a lack of professionalism gets in the way of achieving superior fund performance.

The focus on skill, care and diligence should extend to controlling operating costs, managing the risks and building and extending customer relationships. It should not be forgotten that fund management companies have to manage complex distribution channels, often across borders and regulatory regimes. Fortunately, as this report explains, best practice ensures the firm is able to comply with whatever regime it is regulated in. Skill, care and diligence means that senior managers should, as a matter of course:

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- ◆ find out about relevant regulatory information, and evaluate its effect on the firm;
 - ◆ ensure that the firm works within the regulatory framework appropriate to its products, and that it complies with regulatory requirements;
 - ◆ respond as appropriate to any actual or potential failures to comply with regulatory requirements;
 - ◆ respond to changes in organisation’s policies and procedures resulting from regulatory requirements; and
 - ◆ maintain competence in the role in accordance with regulatory requirements.
-

Skill, care and diligence also means firms should have operational risk analysis that quantifies risk exposures at an appropriate confidence level. In the past, the calibration of stress and scenario tests has not always been appropriately severe, and many base case capital forecasts have appeared overly optimistic.

The good news is that care and diligence can be aided by leveraging the benefits of new technologies. Online compliance checks and system-wide cross-checks and balances are now something that all managers can, and should, implement. Likewise, systems that check trade orders against stock and/or cash positions, or even the systematic recording of telephone calls, are all part of the skill and care that should be applied throughout an organisation.

Checking and double-checking are key to fulfilling fiduciary responsibility. Indeed, the Germans have a saying that is relevant here, that “trust is good, control is better.”

Fiduciary Responsibility

Skill, care and diligence is not just a mantra for the running of the firm, it should extend to the fiduciary management of its assets. The money that a fund manager oversees is entrusted to him as a fiduciary. The term fiduciary can be defined as any person who exercises any discretionary authority or discretionary control respecting the management and disposition of assets.

The term fiduciary is one of the most misunderstood in compliance. The original term was Dutch, and described the combination of management duties and operating duties. By understanding the origins of the word, we can immediately see that clients, as well as the fund manager, have fiduciary responsibilities. These obviously have to be taken into account. In this respect, pension and insurance funds have three fiduciary functions:

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- ◆ a governing duty;
 - ◆ a managing duty; and
 - ◆ an operating duty.
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In a similar way, a fiduciary relationship is one where the firm renders investment advice for a fee or other compensation, whether direct or indirect.

Accountability and objectivity are required in the fiduciary management of assets. By definition, the fiduciary fund manager must act in the best interests of its client. Indeed, the concept goes further than this – fiduciary duty also requires always acting prudently and with discretion regarding the assets of others.

It is possible for there to be a conflict of interest between the fiduciary’s self interest and the interests the fiduciary is charged with protecting. This is overcome by the imposition of a fiduciary duty that eliminates any improprieties by imposing the higher standard of loyalty and care.

In the US, fiduciary concepts are central to the laws governing the industry. For example, under the Employee Retirement Income Security Act of 1974 (ERISA), fiduciaries must discharge their duties with respect to the exclusive purpose of providing benefits to participants and their beneficiaries, and defraying reasonable expenses. This means acting with care, skill and

prudence as explained in the last section. It also means acting in the manner a prudent person would act in a like capacity (the Prudent Expert Rule).

Prudence

Skill, care and diligence have to be applied in a prudent manner. This is not just because prudence is considered to be a virtue; it is because prudential judgement results in a situation where a decision, under prevailing circumstances, must be weighed appropriately to determine the correct answer. The point is, prudence tends to make people err on the side of caution. In a fund management context, this can be a good attribute.

The Prudent Man Principle requires that “a firm must take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management systems.” This principle actually goes back to 1830 and the legal precedent of *Harvard College vs. Amory*. In that case, the Supreme Court of Massachusetts issued the Prudent Man Rule: “Those with responsibility to invest money for others should act with prudence, discretion, intelligence, and regard for the safety of capital as well as income.”

In the UK, prudence is one of the key principles of the Financial Services Authority (FSA). In the US, it is covered by the Investment Company Act of 1940 and the Investment Adviser Act of 1940. The Prudent Man Rule has shaped client interface in the fund management industry for a long time.

Readers should be advised that there is considerable variation in exposure to legal liability across different types of fund managers for the Prudent Man Rule, and they are advised to seek legal clarification if in doubt. For example, funded pension funds that significantly tilt the composition of their portfolios toward stocks can be viewed by the courts as prudent, while unfunded ones may be taking unacceptable risk. Clearly, fiduciaries must make their investment decisions against a background where they are constrained by the interpretation of the legal Prudent Man Rule.

There is an operational element to prudence. In this respect, a firm must conduct its operations prudently. This means, among other things, that a fund manager must maintain adequate financial resources. More often than not, regulators now have minimum capital requirements.

Prudence is, at the end of the day, all about how someone conducts their own affairs.

Market Conduct

Quite clearly, a firm must observe proper standards of market conduct. The reason good market conduct is important to uphold is that it promotes the fair and efficient operation of the capital markets. Portfolio managers and analysts must have the information to facilitate well-informed decisions about how, when and where to invest capital.

The problem for a fund manager is to know which set of the multitude of standards they should follow. Perhaps the best way to address this dilemma is for the fund management firm to use a mosaic of the available norms. One industry body, the CFA Institute, has done this in its compilation of the Asset Management Code of Professional Conduct. Following this would mean that managers:

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- ◆ act in a professional and ethical manner at all times;
 - ◆ act for the benefit of clients;
 - ◆ act with independence and objectivity;
 - ◆ act with skill, competence and diligence;
 - ◆ communicate with clients in a timely and accurate manner; and
 - ◆ uphold the rules governing capital markets.
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Market conduct simply boils down to professionalism and following the rules. Obviously, a set of best practices can be prescriptive, but local rules and regulations should always take precedent. In the UK, the FSA also issues a Code of Market Conduct. This is a set of principles that, if followed, would mean that firms do not manipulate markets or misuse privileged information. There are less codes in Europe and US, instead they rely more heavily on rules.

Fund managers should be also concerned about market abuse through the misuse of market mechanisms, often for personal or corporate gain. Likewise, they should always be vigilant to avoid money laundering by people who utilise their services.

Money Laundering

Money laundering is where the origins and ownership of money, generated as a result of criminal activity, is deliberately concealed. In effect, the money is “cleaned”, or “laundered”. If this is done through a fund management company or its products, the proceeds can lose their criminal identity and appear to have originated from a legitimate source. The practice used to be more commonly associated with drug trafficking, gun smuggling and corruption; more recently, however, the focus for the authorities has been on anti-terrorist activities.

The identification of risky sources of investment flows is one way to get on top of money laundering. In particular, fund managers should be aware of:

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- ◆ the risks of the location where the business is conducted, ie, the geographic risk;
 - ◆ the risks of the products and services offered; and
 - ◆ the risks of the clients that use the products and services.
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In the US, the Bank Secrecy Act and the USA Patriot Act cover fund managers and require such entities to have anti-money laundering and customer identification programmes. In Europe, national laws exist, although these are all based on the Directive 2005/60/EC of the European Parliament and of the Council Directive on the prevention of the use of the financial system for the purpose of money laundering and terrorist financing.

The European Union Second Money Laundering Directive was concerned with preventing the proceeds of crime from being laundered. The Third Money Laundering Directive focused on the processing of funds before a crime or act of terror has been committed.

In essence, the fund management community’s compliance mandate now includes the mitigation of operational risks, while the advent of cost-

effective global communication networks and regulatory infrastructure has made enforcement a reality. Other relevant pieces of UK regulatory legislation include the Proceeds of Crime Act 2002 and the Financial Services and Markets Act of 2000.

Increasingly, regulators expect fund managers to have processes in place for identifying those clients that represent a higher risk for money laundering and terrorist financing. Clients that are identified as representing potential higher risk must undergo enhanced due diligence. Based on the results of this, clients should be rejected if suspicions arise. The higher-risk clients that are accepted should be subject to on-going and enhanced monitoring.

Programme assessments should include an evaluation of anti-money laundering controls, and the oversight and monitoring process should include testing of controls. There should also be a process where it is possible to report concerns to senior management, as well as the resolution of issues.

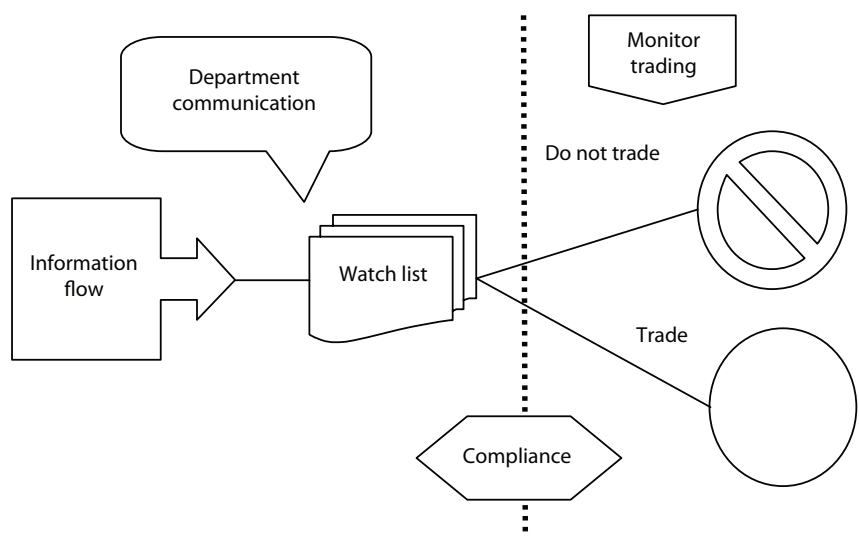
Chinese Walls

Chinese walls prevent any conflicts of interest between different departments of the firm or group. Chinese walls is the term used for measures, be they physical or abstract, which are intended to prevent confidential information being transferred inappropriately. This can be between employees or outside of the firm.

In order to prevent communication of material non-public information and other sensitive information from one department of a firm to other departments, a number of measures should be taken. The firm should:

- ◆ designate a supervisor or compliance officer with specific authority and responsibility to decide on matters where a conflict of interest arises;
- ◆ have a process for interdepartmental communications;
- ◆ maintain a “watch”, “restricted” and “rumour” list;
- ◆ monitor firm and employee trading;
- ◆ restrict or prohibit personal and proprietary employee trading; and
- ◆ review or restrict proprietary trading while the firm is in possession of material non-public information.

Figure 4.1 Chinese wall



As Figure 4.1 shows, physical measures can be put in place to ensure the separation of operating units, such as the location and internal structure of a fund manager's premises. These measures should include, for example, the arrangement of desks and the storage of data. Senior management should be careful of abstract measures. It is important that employees are aware of the rules that apply to the handling of confidential information and that they are familiar with the rules.

In order to achieve effective Chinese walls, it is important to ensure compliance in such areas as the review of employee and proprietary trading, documentation of firm procedures and the supervision of interdepartmental communications. Some thought should be put to a policy to restrict or prohibit personal and proprietary employee trading. At the very least, compliance should carefully monitor firm and personal employee trading. At the end of the day, fit and proper employees know and understand these requirements.

Fit and Proper

All fund management companies should be run with a high standard of honesty and integrity by their directors and staff, and this means they must be fit and proper for the job. Obviously, firms should comply with any relevant codes, orders or rules issued for activities within the securities market. These include:

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- ◆ staff acting with diligence and appropriate skill in relation to their stations; and
 - ◆ staff being expected to treat their clients reasonably and fairly.
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Certain qualifications are thought desirable to practice in the profession. Entry to the profession is dependent on the fulfilment of criteria related to educational qualifications and work experience. It involves the establishment of a regulatory body to administer and monitor professional controls.

Not all fund managers have "discretion" over their assets. If they do not, then they are effectively just advisors. In some instances, such a status is governed by a different set of rules. That said, such advisors still need to prove that they are fit and proper for their role, although obviously this differs between different geographies.

The Geographic Differences in Regulation

One of the most striking developments in fund management in recent years has been the continued rise in cross-border investment and client sourcing. Competition in financial regulation enhances innovation, choice and efficiency - it also tends to remove geographic barriers.

Domestic regulation, which oversees fund managers in their home area, are now being challenged across the US and Europe. Now, numerous regulatory regimes within a given market are the norm. At the same time, the lines between different types of financial institution fund managers and different categories of financial activity have become more interlinked.

US

The largest market for fund management is the US. In order to undertake business there, investment companies have to register under the Investment

Company Act and abide by its regulations. The National Securities Markets Improvement Act of 1996 is one of the key pieces of legislation, as it makes the Securities and Exchange Commission (SEC) responsible for overseeing fund managers with over US\$25 million under management. State regulators are responsible for fund managers with smaller amounts under management.

The SEC is the world's most recognised regulator. It was established by the US Congress to regulate securities markets with the intent of protecting investors. It covers the registration, regulation and management of any joint investment system, including mutual funds.

The Securities Exchange Act of 1934 created the SEC and codified the self-regulatory system. Self-regulatory organisations (SROs) retain primary authority to regulate their members, but the SEC has the power to suspend or revoke an exchange's registration. At the time of going to press, there is a review of the future shape of regulation in the US taking place. One of the proposals is to merge the SEC and the Commodities Futures Trading Commission (CFTC). The SEC has enforcement authority in that it can bring civil charges against individuals or companies thought to have violated securities law.

In fund management terms, the Employees' Retirement Income Security Act of 1974 (ERISA) is an important piece of regulation. This act established a higher standard for fiduciaries of retirement plans. In essence, they are forced to act with the "care and skill of a prudent person, familiar with such matters." This law is controversial, as sometimes the principle can clash with long-term objectives. Fund fiduciaries are therefore forced to be cautious in the asset allocation process, and their portfolios must be optimised to control risk, not merely to seek the highest expected return.

ERISA gave rise to two alternative types of mandate given to the fund management industry, namely those where prudent person rules are applied and those where fund managers are given quantitative portfolio restrictions.

Increasingly, however, hedge funds are being established where in the past a fund manager would have been set up. A hedge fund is not an investment company or fund manager for the purposes of the Investment Company Act if it has less than 100 beneficial owners and does not publicly offer its securities.

UK

The Financial Services Authority (FSA) is the UK's equivalent of the SEC. It is set up as an independent, non-governmental body and was granted statutory powers by the Financial Services and Markets Act 2000. The central part of the regime is its Code of Market Conduct. This is designed to ensure:

- ◆ a fair market which is free of unfair practices and abuse, and in which all investors have reasonable opportunity to trade at the best price available for their transaction size;
- ◆ an efficient market in which users – at reasonable cost – can achieve optimum pricing for their type of transaction as a result of having adequate information on, and access to, current supply and demand, and in which participants have the maximum choice of methods for minimising their exposure to risk; and

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- ◆ a safe market where the infrastructure is reliable and robust, and performance of trades is reasonably assured.
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The FSA is a company limited by guarantee and financed by the financial services industry. Once again, at the time of going to press, the future of the FSA is under review. Currently, the Treasury appoints the FSA board that sets out overall policy. Day-to-day decisions and management of the staff are the responsibility of the executive.

In the UK, authorised firms are subject to rules that focus primarily on a firm's "fitness and properness", financial resources and conduct of business with clients. The UK framework is called ARROW – the Advanced Risk-Responsive Operating framework. It applies two basic approaches to supervise firms: the vertical and horizontal. To summarise:

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- ◆ the ARROW Firms approach, used when assessing risks in individual; and
 - ◆ the ARROW Themes approach, used when assessing cross-cutting risks (ie, those involving several firms or relating to the market as a whole).
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As a general principle, the FSA supervises firms according to the risks they present. It assesses such risks in terms of the scale of the effect these risks will have on consumers and the market, and the probability of problems occurring. The nature and extent of its supervisory relationship with a fund manager depends on how much of a risk it considers it could pose to.

Europe

The next largest regulatory geography is Europe, although the market is less homogeneous than in the UK or US. In Europe, fund managers have to register with a national regulator and abide by a multitude of directives that are cross-recognised. They are then given what is called a single financial passport to conduct business throughout the continent.

The concept of mutual recognition is fundamental to much of the EU legislation on supervising financial services in a single European market. Indeed, convergence of supervisory approaches between member states is a key element in making the single market a reality. Investors and financial supervisors want supervisory arrangements that can address cross-border risks effectively and efficiently. European regulation supports a number of alternative fund management models:

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- ◆ fund managers within the continental or universal banking model;
 - ◆ fund managers within the Anglo-Saxon or British banking model;
 - ◆ fund managers owned by insurance companies; and
 - ◆ independent fund managers.
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The European Union regulation of the fund management industry is directive and all about providing a single licence for the selling of investment funds across regulatory jurisdictions. The Committee of European Securities

regulators (CESR), meanwhile, has issued conduct of business rules for both retail and institutional funds.

The other piece of pan-European fund management regulation is the undertakings for collective investments in transferable securities (UCITs). This directive is authorised under a harmonised European Union framework. The beauty of this approach is that a UCITs fund established in one EU member state can be sold in other member states without additional authorisation. The UCITs regime is very prescriptive and contains numerous investment and leverage restrictions. For example, the UCITs may:

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- ◆ invest only in transferable securities, listed money market instruments, other UCITs, non-UCITs funds (capped at 30%), bank deposits and financial derivatives that meet certain criteria;
 - ◆ not invest more than 10% of its net assets in the securities of any one issuer – the aggregate value of investments in issuers in which the UCIT invests more than 5% of its net assets is capped at 40%;
 - ◆ not invest more than 20% in any single underlying fund and must not acquire more than 25% of the units of another UCITs; and
 - ◆ not, as a general rule, grant loans or act as guarantor.
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The 1985 Undertakings for Collective Investment in Transferable Securities Directive (UCITS) established rules for pooled investment vehicles. Funds established in accordance with these rules can be sold throughout the EU, subject to local tax and marketing laws. There have been various versions of UCITs, and the management company passport is an important part of the latest, UCITS IV.

The Markets in Financial Instruments Directive (MiFID) is another major part of the European Union's Financial Services Action Plan (FSAP), which is designed to help integrate Europe's financial markets. The aim of the Investment Services Directive was to set out basic high-level provisions governing the organisation and conduct of business requirements that should apply to firms. It also aimed to harmonise certain conditions governing the operation of regulated markets.

In Europe, a fragmented regulatory landscape leads to unacceptably large variations in conduct of business (COB) rules and in the level of product disclosure, which would result in a real and significant (as opposed to perceived or theoretical) risk to investor protection. One answer to this, much favoured by some European banks, is quite simply to establish primacy for the regulator in the country of incorporation of the financial institution (the home regulator), and give that regulator the responsibility for overseeing the financial institution throughout the EU (if a European institution) or throughout the world.

Europe is concerned about the effectiveness of regulation of retail investment products across the banking, insurance and fund sectors, with a particular focus on the rules around selling processes and pre-contractual consumer disclosures. The Commission has dubbed these products packaged retail investment products (PRIPs) in order to distinguish them from straight securities. More regulation is expected in this area.

Eastern Asia

The Eastern Asia market is developing new rules and regulations at a fast rate. Often, these are copy and paste versions of more developed market regimes.

Asia–Pacific has a fast-emerging but fragmented approach to regulation. That said, fund management firms should not ignore its potential. The region is set for dramatic change on the back of predictions that China will become the world’s largest economy by 2040, and India the third largest.

Japan is one of the most advanced Asian Pacific fund management regulatory regimes thanks to a generation of domestic investment tie-ups, based largely on group relationships. Japanese regulations governing solicitation of Japanese investors, although weakly enforced, are as restrictive as those of the US and require careful attention from a compliance perspective. The possibility of being engaged in systematic illegal solicitation of Japanese investors for funds is very real. Japanese regulators are becoming much more proactive in enforcing compliance requirements against regulated financial intermediaries.

In Japan, pension funds, insurers and other institutional investors are turning to well-established international fund groups to meet their fund management needs. Fund managers require a “securities sales intermediary” registration. This is the licence of preference for any offshore fund group that wishes to market to Japanese institutional investors, or that wishes to work with a Japanese distributor to access the high-net-worth Japanese individual market. The only catch to this registration is that it requires a “sponsoring securities firm” which will take responsibility for complying with rules governing the solicitation activities of foreign fund managers.

Hong Kong is widely recognised as the leading fund management centre in Asia, with the largest concentration of fund managers. The industry is characterised by its international and offshore nature. Fifty-six percent of the assets under management were managed onshore. Hong Kong has already established a strong base of fund management businesses, both in terms of product variety and financial management expertise.

There has also been a substantial increase in the nature and types of funds available to the retail investing public in Eastern Asia. In the past, retail funds in the region consisted of four fund types: equity funds, bond funds, money market funds and bond/equity (or diversified) funds. Today, retail investors may also invest in exchange-traded funds (ETFs), index funds, guaranteed funds and hedge funds.

Offshore Domiciles

Regulatory arbitrage and the desire to better manage tax liabilities have given birth to a very large “offshore” fund management industry. An offshore fund management location is a polite term for what used to be called a tax haven. Offshore centres benefit from a low burden of regulation.

It should be noted that the following uses of offshore fund management are illegal:

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- ◆ creditor avoidance;
 - ◆ market manipulation; and
 - ◆ tax evasion.
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Many offshore centres, such as Singapore, Ireland and Luxembourg, are very responsive towards the fund management industry. There is a range of legal fund structures, and firms can set up with comparative ease. The most common offshore locations for fund managers are:

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- ◆ Bahamas;
 - ◆ Bermuda;
 - ◆ British Virgin Islands;
 - ◆ Cayman Islands;
 - ◆ Cyprus;
 - ◆ Guernsey;
 - ◆ Isle of Man;
 - ◆ Jersey;
 - ◆ Luxembourg;
 - ◆ Malta;
 - ◆ Mauritius;
 - ◆ Panama;
 - ◆ Singapore; and
 - ◆ United Arab Emirates.
-

Typically, the offshore regulatory regime will take a two-tier approach, making a distinction between funds that are offered generally to members of the public, which require a high degree of regulation because of the nature of the source of the funds, and non-public funds.

In offshore centres, non-public funds are usually either categorised as private funds or professional funds. Typically, investors in non-public funds can be assumed to be sophisticated because of the nature of the offering.

Compliance, Operations and Procedure Manuals

It is essential to have good compliance, operations and procedure manuals. In order to handle the profusion of rules, stand-alone compliance departments were developed in the early 1960s. Prior to that, legal departments generally had responsibility for compliance functions. Now, it is best practice for companies to prioritise a “culture of compliance” at every level of their organisation.

Compliance, operations and procedure manuals should focus on the whole investment value chain, including upstream processes such as product development and design, as well as downstream activities such as marketing, distribution and client on-boarding.

The compliance manual should not simply be a summary of the rules. The fund managers’ full compliance procedures need to be included, showing how the firm has tailored its operations to the rules. Aside from the areas that would be expected, they should also be supported by an operating and procedure manual designed to serve as a resource for management and technical staff.

The operations and procedures manual does not have to represent the universe of operating- and procedure-related material. It should provide needed background information and guidance on the structure of the company, and should identify information sources and contacts. The compliance manual should state internal reporting requirements so that data can be classified and linked to support reporting. It should also:

-
- ◆ identify key reporting requirements for risk reporting and aggregation across risk disciplines and the organisation;
 - ◆ identify key relationships/linkages needed at data level to support reporting requirements;
 - ◆ detail trade pre-clearance requests and approval;
 - ◆ detail post-trade reviews of employee trades;
 - ◆ explain how to do regular attestation of trades by employees;
 - ◆ detail the exception resolution process; and
 - ◆ show the process for approval of trades by compliance staff.
-

The operations and procedures manual is a central part of the protection of client money and assets, and is fundamental in maintaining client confidence. It details how the firm ensures that customers' money and assets are safe, and remain safe even if a fund manager becomes insolvent.

What Should Be Included in an Operations Manual?

Every operations manual is different, so there is no exact formula as to what should be included. However, the document should essentially map out exactly how the fund management company operates, and should start with the company's mission statement, overview and history.

The idea is for the operations manual to be a "how-to" procedures document. That means it should have current phone numbers, e-mail addresses and other ways to reach important contacts, including:

-
- ◆ management contact details;
 - ◆ full list of firms' accounts;
 - ◆ fund restrictions and investment guidelines;
 - ◆ GIPS composites;
 - ◆ contact numbers for emergencies;
 - ◆ employee coverage;
 - ◆ security procedures;
 - ◆ business recovery procedures;
 - ◆ business continuity;
 - ◆ health and safety plans; and
 - ◆ desk manuals.
-

The operations manual, essentially, is a tool kit for replicating the knowledge of the business and what to do on any given day. In this respect, it should also include:

-
- ◆ opening procedures;
 - ◆ closing procedures;
 - ◆ cash handling;
 - ◆ trade handling;
 - ◆ custody;
 - ◆ settlement;
 - ◆ IT systems and back up;

- ◆ daily asks;
- ◆ authorisations;
- ◆ compliance procedures (refer to compliance manual);
- ◆ account procedures;
- ◆ sales procedures; and
- ◆ commission and fee guidance.

In other words, as much detail as possible should be included in the various manuals.

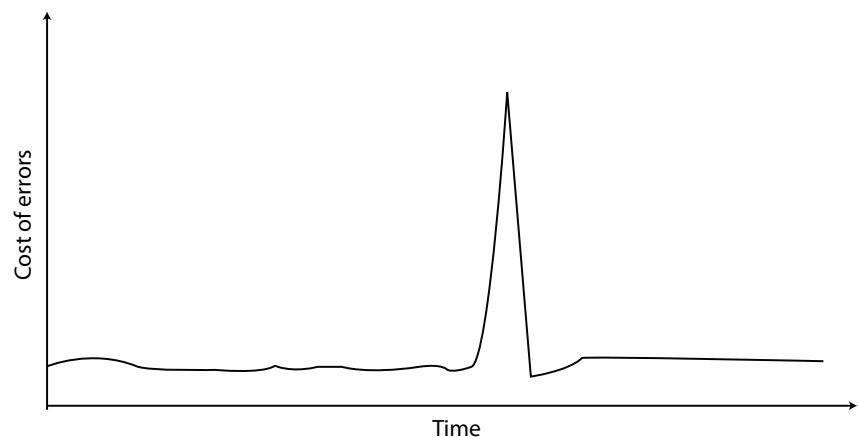
The Importance of Adequate Capital

This chapter will end with a note about capital. Having enough capital is a pre-requisite for being in the business, It is therefore important for firms to be able to demonstrate to regulators that they have sufficient balance sheet and working capital strength to carry out their business. The capital base should be commensurate to the degree of risk that a fund manager might need to absorb, based on type and volume of activity.

Firms should comply with capital adequacy rules. This includes promptly informing the regulators should their financial situation change. In order to do this, firms should establish robust systems of internal control and risk, which should be supplemented by strict liquidity and credit requirements. In some jurisdictions, securities firms are subject to large exposure limits, which are generally the same as those applied to banks. Management must recognise that financial institutions face an increased risk of loss when their assets, liabilities or business activities are not diversified.

Figure 4.2 shows how the cost errors impact fund managers over time. Needless to say, most of the time the cost is low. It is the unforeseen and very costly mistake, shown by way of a spike, that the firm needs capital to provide for.

Figure 4.2 Risk to capital from operational errors



Senior management should ensure that the firm develops reporting systems to assist them in monitoring such risk concentrations.

Conclusion

This chapter has focused on regulation and the legal framework that fund managers have to work within. Over the years, these have developed in complex and heavily paperwork-intensive rules.

There are differences in regulation, whether rules or principals, self or regulator imposed. They also differ between regions. That said, there are a lot of commonalities. The key regulatory concepts, as explained earlier, are the same wherever they are in the world.

It has been shown that regulations involve a trade-off between the underlying rationale for regulating financial markets, such as investor protection, and the costs imposed on other market participants. It is beholden on the manager to address such issues from the top down. The legal and regulatory landscape should be a part of the DNA of the firm. The next chapter will focus on the other core part of that DNA, namely the investment process and philosophy.

5

Investment Process and Philosophy

“The secret to winning the Winners game in investing is simple: Plan your play and play your plan to win your game. And if you do not think and work that winning way in investing, you will, by default, be playing the Loser’s game.” *Charles Ellis*

Process is the most important element to get right for success in fund management. It is the means by which the investment team delivers risk-adjusted outperformance. It is also the way to win the winners game, as Charles Ellis so eloquently put it. Process means that fund managers are able to demonstrate that they can methodically deliver the investment returns they offer their clients. In effect, process is focused on capturing the different elements of investment return in a consistent and, more importantly, repeatable way.

Process determines what element of return the portfolio ultimately captures. Sharpe (1992) showed that asset allocation accounts for the largest part of the variability in the return on a typical investor’s portfolio. As such, it is no surprise that many processes focus on asset allocation. The other elements, such as portfolio weights, stock picking or market timing, can also deliver alpha. It is up to the fund manager to define and differentiate between these different ways and approaches.

In order to affect proper process, a fund manager has a number of decisions to make, which are listed below, in order.

-
- ◆ Decision 1 – the choice of asset classes in which to invest.
 - ◆ Decision 2 – the choice of asset mix and class weights that will remain unchanged over time. Such weights are often determined by an optimisation procedure designed to generate an expected risk (variance) and appropriate return.
 - ◆ Decision 3 – the choice of individual securities within each asset class, and adjusting the asset class weights from their normal values on a short-term basis. This is the security selection and market timing choice.
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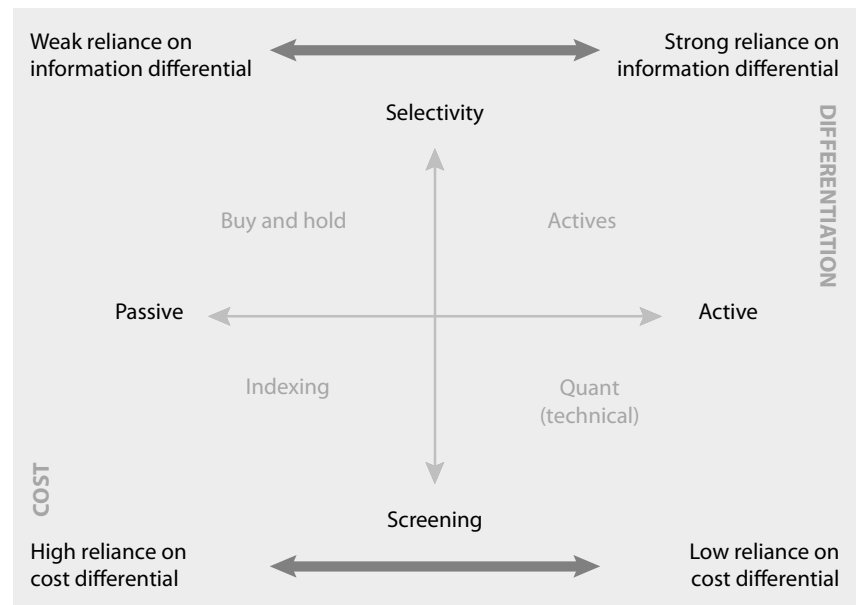
These three steps show how important it is for the investment process to begin with an outline of the steps involved in creating a portfolio. The sequence of actions is important, although often these may well be iterative. A good process can then provide, in an orderly way, for the fund manager to replicate previous success. The written steps allow potential and existing clients to see, and understand, the source of performance. In essence, the investment process emphasises the different components that are needed for an investment strategy to be successful.

Allied to process is philosophy. The investment philosophy should address the strategic approach to investing and what role the firm’s insights will play in the total investment portfolio. In this respect, the fund manager should ensure that the investment process is consistent with the applicable investment beliefs, objectives and risk profile. These should also be aligned to the marketing stance of the firm, its products and its prospectus or investment guidelines.

The range of investment styles that both process and philosophy can encompass is best described by a two-dimensional chart (see Figure 5.1). Strategies exist right along the spectrum from passive to active. These involve varying degrees of selectivity in the portfolio constituents, which can be achieved either quantitatively or qualitatively. What the figure does not show is that investors prefer the active approach. A 2008 survey by Fabozzi, Focardi and Jonas clearly showed this to be the case. It gave the choice of two types of investment processes, and 74% of their respondents favoured active investment.

Figure 5.1 Investment styles

Source: University of Edinburgh Management School



In Figure 5.1, selectivity on the upper x axis concentrates on philosophy. Screening, on the other hand, is on the lower x axis, and focuses on the investment universe. On the upper y axis, active process concentrates on delivering return from skill. Put differently, a passive equity process delivers the risk-free rate plus beta, whereas an active process delivers the risk-free rate plus alpha.

As can be seen, there are wide differences in informational benefit and cost between strategies. The latter cost is impacted by the cost of trading. Meanwhile, the primary source of return in passive investing, which does not have high costs, comes from earning the economic risk premium.

Process can be purely focused on stock picking at one extreme and purely passive at the other. A good process is designed, in principle, to exploit evidence of predictability in individual stock's specific risk. Sometimes, however, managers, as a result of their bottom-up security selection decisions, end up making unintended bets on market, sector and/or style. As has been previously stated, the best way to avoid this happening is by formulating an investment process based on a clear investment philosophy.

Stating the Investment Philosophy

An investment philosophy is essentially based on the belief that an investment team has on the extent of market efficiency and how to exploit that inefficiency.

It is important to state the philosophy, as this is the basis for the fund manager's particular approach to maximising returns. Also, the absence of well-articulated investment philosophies creates a challenge for clients to differentiate alpha from noise, and alpha generators from those who are just lucky. For this reason, all fund managers should spend time defining their investment philosophy, perhaps the most important element of what the firm does.

The efficient market hypothesis (EMH) is the theoretical foundation of the professional fund management industry, and fundamental for understanding investment philosophy. This is because it is the cornerstone of the body of knowledge learnt by all holders of our industry's professional qualifications.

Finance theory makes a distinction between the three forms of EMH. The strong form suggests securities prices reflect all available information, even private information. The semi-strong form asserts that security prices reflect all publicly available information. The weak form of the hypothesis suggests that past prices or returns reflect future prices or returns. Very few fund managers dispute the weak form. Regardless of which is "believed in", any definition of the firm's philosophy should refer to what element of market inefficiency the process is designed to capture. Indeed, when stating the investment philosophy, the firm should:

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- ◆ state clearly what degree of market efficiency the firm believes in;
 - ◆ state clearly how the inefficiencies, if any, are to be exploited by the fund manager;
 - ◆ tie the philosophy to the investment time horizon;
 - ◆ be clear and concise and base the investment philosophy on sound finance theory;
 - ◆ have a set of beliefs regarding the security pricing mechanism and what it is that causes securities to be mispriced;
 - ◆ have a set of beliefs regarding the manager's competitive advantage in exploiting these mispricings; and
 - ◆ show how these beliefs can be exploited to generate alpha.
-

Once defined, the investment philosophy needs to be adopted and believed in by the investment team. This includes existing as well as future team members. Recruitment of fund managers should always involve an initial screen that is based on the potential recruit's "buy in" to a firm's philosophy. There is no point hiring a top-rated fund manager if they are a value manager and the firm is a growth shop. Likewise, there is little point in hiring a short-term fund manager if the philosophy is to capture long-term returns.

Setting the Time Horizon

Portfolio managers come and go. The investments they make may prove longer term. Time horizon is important to define in the context of investment philosophy. Indeed, where fund managers mostly disagree is on the time horizon over which efficiency exerts itself. Active managers work on the premise that the market is inefficient in the short run, or even medium term, but clearly require it to be efficient in the long run in order for their valuation anomalies to be spotted and corrected by the market. Passive managers, on the other hand, work on the premise that the market is efficient in the short run as well as the long run.

Table 5.1 shows the breakdown between strategy and time horizon. At one extreme, it is possible to have a philosophy based on capturing returns from short-term trading on technical indicators. That said, long-term strategies have tended to prove more reliable.

Table 5.1 Investment strategies defined by time horizon

	Passive	Momentum	Contrarian	Opportunistic
Short term	Futures and options	Technical	Contrarian indicators	Arbitrage
Medium term	Index replication	Event driven	Market timing	Pairs trading
Long term	Shareholder activism	Low PEG ratios	Low PE or PB ratios	Strategic stakes

Table 5.1 shows that, in addition to the passive strategies that can be applied with varying enhancements depending on time horizon, there are also momentum, contrarian and opportunistic strategies. Each has to be approached in a different way depending on the time horizon of the market inefficiency.

The most popular strategies are momentum and contrarian. Momentum fund managers believe that what has happened in the recent past is likely to continue to happen in the future. On the other hand, contrarian fund managers believe in mean reversion. Once an approach is decided on, it is best to stick to it. Opportunistic fund managers, for example, can use arbitrage, pairs trading or take strategic stakes as a way to capture alpha. Those that simply assume that markets make mistakes and that these mistakes sometimes lead prices to overshoot (which is what contrarians assume), and sometimes to undershoot (which momentum investors assume), suffer style drift and a lack of definition. When talking about time periods for capturing inefficiencies, it is worth noting that the average holding period of mutual fund managers has declined to just 11 months.

Short-term relative performance monitoring has resulted in the adoption

of a short-term attitude and approach by fund managers. Clearly, such a holding period would only really be suitable for short-term strategies. Medium- and longer-term approaches should also have longer holding periods. Coming back to the earlier part, this should be regardless of the tenure of the portfolio managers or analysts.

To conclude, it is important to state the investment philosophy and the firm's strategy to exploit any inefficiency in the market as a first step in determining the investment process.

Setting the Number of Holdings

The number of holdings a manager chooses to have in their portfolio is also a big determinant of both volatility and, indeed, returns. Everyone knows that a portfolio needs a minimum number of stocks. What they may not know is that evidence shows that increases in portfolio holdings diminish excess return potential. This is because:

-
- ◆ more stocks diminishes the weight of high-confidence stocks;
 - ◆ there is less focus on each individual name; and
 - ◆ accountability for the overall portfolio becomes dispersed.
-

A number of factors have to be taken into account. It takes more stocks to accommodate larger assets under management. On the converse side, as firms grow they can afford more analysts to cover more stocks.

There is no right or wrong number of holding for a portfolio, although diversification kicks in after 25-30 stocks, and too much diversification hinders alpha. It is a good idea to set a range and keep within its limits. In other words, it is a good idea to have a defined investment policy and stick to it.

Defining an Investment Process

Developing a repeatable, defensible and successful investment process should be the goal of all fund managers. Once stated, it should be followed. In this respect, it is important to ensure that the firm's portfolio managers not only adhere to it but also that have sufficient room to manoeuvre when doing so. All too often managers are told to follow a certain approach but then do not have the flexibility to deviate from the benchmark in order to achieve their goals.

The point about defining the decision-making process is that it gives key insights to both clients and consultants into how a fund manager may deliver in the future. A poor process does not hold any comfort for experienced investors. Rigour and analytical insight are crucial and active managers have to demonstrate they have these. Likewise, quantitative and execution skills are important for passive strategies. These should show through in the investment process.

Any process should start with the asset class and the manager's unique approach to that asset class (including, for example the holding period and number of stocks). This should be followed by the selection of an investment benchmark or index for that approach, and how the universe is to be narrowed down to something more manageable. In order to do this, it is necessary to ask:

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- ◆ what are the investor's objectives and the fund's return profile?
 - ◆ are these to be achieved using an active or a passive approach?
 - ◆ is the strategy top down or bottom up?
 - ◆ is the strategy tactical or strategic?
-

Once these questions have been asked, the next part of any process is the construction of the portfolio. The screening is often more quantitative than the rest of the process. At this stage, and indeed for the balance, the process should make clear who is responsible for what, particularly the management of the portfolio and what responsibilities they will have.

When it comes to responsibilities, team approaches should have the lines of authority delineated. In this respect, it is important to spell out what the main characteristics of the in-house decision-making and investment processes are, such as whether the company's decision-making process is rule-bound or discretionary. It helps to put the process into a diagram or flow chart. A picture, as they say, is worth a thousand words.

The next step is the asset selection decision. This is where the portfolio manager selects individual assets within each asset class to construct the portfolio. At this stage, it is important to describe the process for building portfolios. It is common, but not mission critical, to use optimisation or other tools to ensure the portfolio is robust in a risk–reward sense. These areas should be addressed in the process design:

-
- ◆ individual securities selection;
 - ◆ sector weightings;
 - ◆ country selection;
 - ◆ currency; and
 - ◆ market timing.
-

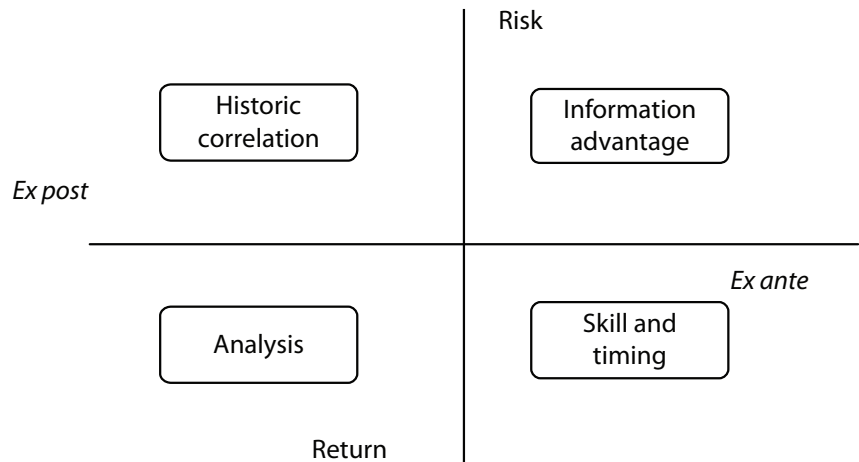
Most of the above are viewed as part of the investing process. It should be remembered that sell decisions are as important to define as buy decisions. In the process design, it should be stated if a stop loss or a target price is to be used. Likewise, if the sell decision is based on relative or absolute values, as well as what to do in cases of significant underperformance.

Whether buy or sell, clearly, the research is important. How this is done should be clearly defined. What, for example, is the level of diligence required for each piece of research? Are written reports required and, if so, how long are they and what do they include?

The final stage is execution, where the portfolio is built and the result executed by the trading team to make the portfolio come to life. It is at this stage of the process that it should be remembered that alpha can be lost by poor execution.

Figure 5.2 shows the process from the perspective of where the insight is coming from. Historic correlation and analysis is based on past information (*ex post*); skill and forecasting are future variables (*ex ante*). *Ex post* information is said to contain no forecasting power and hence is largely used for correlation and beta calculation by passive managers, More interesting for an alpha manager is the *ex ante* part of Figure 5.2.

Figure 5.2 Investment insight



Regardless of in which quadrant the analytical discussions lie, it should be clear whether there are differences in the processes at either the strategic or tactical asset allocation level. Strategic, in this respect, is long-term positioning and tactical is short-term positioning. A good process should also make clear what type of information, model and/or algorithm is used. This can be done at various levels of the decision-making process. It is a useful idea, for example, to show the relative importance of the fund manager's personal view in the investment decision. This is especially the case in respect of "star fund managers".

When defining the process, a common mistake is to ignore the frequency of decisions. How frequently decisions are reviewed can significantly impact returns. In a similar vein, the process document should identify if there are any commonly used investment constraints in fund mandates, such as diversification requirements, capped portfolio weights and limits to particular instruments exposures.

Along the same lines, the investment process should also incorporate some risk parameters. What are, for example, the primary risk management techniques that are applied, both at the company level and by individual managers? Also, what happens when things go wrong? It is clear, therefore, that a good process is more than just about buying low and selling high, it is about focusing on valuation and having a robust methodology.

Incorporating Valuation Models

Many valuation models developed and used in the investment process have earnings or cashflows as primary inputs. This is because the theoretical price of any share is the pro-rate discounted cashflow of all future cashflows. There are numerous ways that fund managers can approach forecasting. These include:

- ◆ bottom-up forecasts;
- ◆ qualitative forecasts;
- ◆ quantitative forecasts;
- ◆ top-down forecast; and
- ◆ trend-based forecasts.

The first of these, bottom-up forecasting, requires that the investment team build a forecast model that includes:

Balance sheets:

- ◆ excess cash and investments;
 - ◆ receivables – age, write-off experience and reserves;
 - ◆ inventory – valuation methods, write-off experience, levels, turns and reserves;
 - ◆ assets – securities, notes and intangibles; and
 - ◆ liabilities – stated, understated, unstated and contingent.
-

Cashflow statements:

- ◆ revenues – recognition policies and trends;
 - ◆ gross and operating margins and trends;
 - ◆ impact of inventory and depreciation methods; and
 - ◆ exceptionals and extraordinary.
-

The top-down forecasts, on the other hand, require that the modelling process include a review of macroeconomic and applicable industry conditions. The top-down element is necessary, even for a bottom-up firm, as the business cycle impacts cashflows.

The output of such models need not always be used in such sophisticated ways. Many are qualitative or trend based. Indeed, much of the industry still uses forecast price/earnings (P/E) ratios, representing a multiplier applied to earnings to determine the value of a share. This pragmatic, everyday approach to valuation can incorporate many of the factors that come into play in the pricing. For example, in simplistic terms, firms that have good growth tend to trade at high P/E ratios, while the opposite is true of low P/E firms. Whether fund managers use sophisticated or simple models, they all rely on future expectations to determine value. A stock with a high P/E ratio means the stock is more expensive relative to earnings. A stock with a low P/E ratio indicates negative expectations for the future of the company. The objective of the analyst or fund manager is to determine the company's quality of earnings as much as the actual value. Any forecasting model, rule of thumb or ratio has to be used with analytical insight!

Understanding the Mathematical Relationship Between Risk and Return (CAPM)

It is not possible to refer to valuation without addressing modern portfolio theory, which was touched upon in the first chapter. This gave birth to the capital asset pricing model (CAPM), an important pricing framework for the asset management industry, as relates the risk–return trade-off of individual assets to market returns. The basic form of the CAPM is a linear relationship between returns on the individual shares and stock market returns over time. The CAPM is stated thus

$$E(x_i) = r + (E(x_m) - r)\beta_i$$

Where $E(x_i)$ is the expected return on the asset I , r is the risk-free rate, $E(x_m)$ is the expected return on the market portfolio (S&P index) and β_i equals i -th asset's systematic risk (a proportion of market risk).

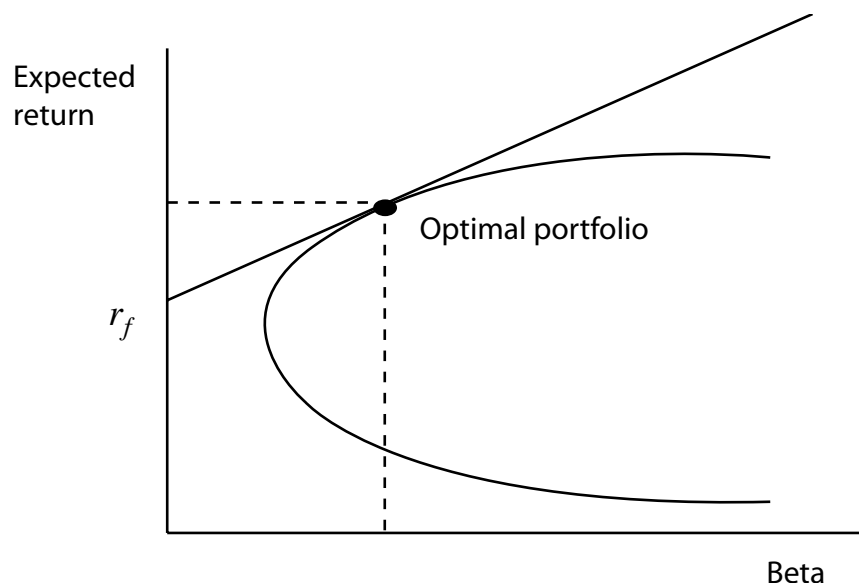
Despite its enthusiastic adoption by the fund management industry, CAPM is often attacked by both practitioners and academics. What is not in dispute, however, is that its existence shifts the burden of proof from passive management to active management.

What the CAPM brings to fund management is that it shows every investment portfolio to have inbuilt risk. The degree of this risk changes from industry to industry and from company to company, but it still must be managed. Risks can be reduced through diversification. This is, in effect, the fund manager's job. Such risks are referred to as unsystematic risks, as they are associated with a particular company or sector of the business. This unsystematic risk is not rewarded and can be eliminated. Clearly, a good active portfolio manager wants to eliminate downside risk and capture upside risk!

CAPM theory includes the following propositions:

- ◆ investors in shares require a return in excess of the risk-free rate to compensate for the systematic risk;
- ◆ investors should not require a premium for unsystematic risk, because this can be diversified away by holding a wide portfolio of investments;
- ◆ because systematic risk varies between companies, investors will require a higher return from shares in those companies where the systematic risk is greater; and
- ◆ the security market line (SML) is a graphic illustration of CAPM that depicts the risk–return relationship of a security (this is shown in Figure 5.3).

Figure 5.3 The securities market line



The x axis represents the risk (beta) and the y-axis represents the expected return. The market risk premium is determined from the slope of the SML.

If an investment's return falls on the SML, the investment is considered to be correctly priced, because the expected return of the investment matches the one according to the CAPM (based on its beta). If the expected return of the investment differs from the one as predicted by the CAPM, the investment is considered to be either underpriced or overpriced. The difference between the investment's actual expected return and its fair return is the alpha.

Despite the CAPM, there is no perfect measure of risk. However, the CAPM does provide a framework for assessing the relationship between the risk and return. The CAPM also gives the industry the tools and performance benchmarks from which professional fund management derives. This is best summed up by William Sharpe, who observed that "once a procedure for measuring exposures to variations in returns of major asset classes is in place, it is possible to determine how effectively individual fund managers have performed their functions and the extent (if any) to which value has been added through active management."

From a day-to-day fund management perspective, the systemic part of the market model can be broken down between various factors. A fund manager can make use of these attributes in a number of different stages of the investment cycle, namely:

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- ◆ return forecasting;
 - ◆ portfolio construction;
 - ◆ middle office;
 - ◆ risk management; and
 - ◆ portfolio attribution.
-

In addition to the above, there are now a whole range of alternatives to CAPM which all have different predictive power and uses in fund management.

Alternatives to CAPM

Although the CAPM is an elegant model, it is considered by many to have restrictive assumptions, particularly in respect of transactions costs and private information. The main criticism of the CAPM is that it uses only a single factor in determining the return of a portfolio, namely the beta of the portfolio. However, there are a number of academic models that can be seen as alternatives to the CAPM that address these other factors, the most important of which is the arbitrage pricing model.

Factor models are used commonly by both quantitative and fundamental managers. Volatility and momentum are typically the most important. Size, value and leverage have become less important since 2000, although these things are very time dependent and go in and out of fashion.

Correlation lies at the heart of these other asset pricing models, as well as the arbitrage pricing theory. Its use as a measure of dependence between financial instruments is essentially founded on an assumption of multivariate, normally distributed returns.

Arbitrage Pricing Theory

The arbitrage pricing theory is based on arbitrage. Multiple companies with the same exposure to market risk should be priced to earn exactly the same

expected returns. If they were not, it would be possible to buy more of some and sell the rest. This is the essence of the theory. The asset return is presented as follows

$$\tilde{z}_i = \alpha_i + \beta_{i1}\tilde{f}_1 + \beta_{i2}\tilde{f}_2 + \dots + \beta_{ik}\tilde{f}_k + \tilde{\varepsilon}_i$$

where f_k denote the K factors, the coefficient β_{ik} denote asset i's factor loadings and ε_i denotes the residual or idiosyncratic risk of asset i.

The arbitrage pricing model does not make the restrictive assumptions mentioned earlier, such as transactions costs and private information. As a result, it does not lead to the conclusion that one beta can capture an investment's entire exposure to market risk. Instead, in the arbitrage pricing model you can have multiples sources of market risk and different exposures to each factor. Arbitrage pricing theory itself gives little guidance as to what the relevant factors are.

In using the model it is possible to examine historical data on stock returns and estimate each stock's exposure to various factor analysis. The analysis specifies a number of common factors that affected the historical return data and measures the beta relative to each of the common factors. It also provides an estimate of the actual risk premium earned by each factor.

Multifactor models of risk and return were developed by the fund management industry out of arbitrage pricing. The solution to identifying factors is to replace the unidentified statistical factors with specific economic factors. The resultant models now have an economic rationale. Indeed, there is now a class of multifactor models, where real components of return such as dividends may be based on common factors like the business cycle.

Implementation of an Active Investment Process

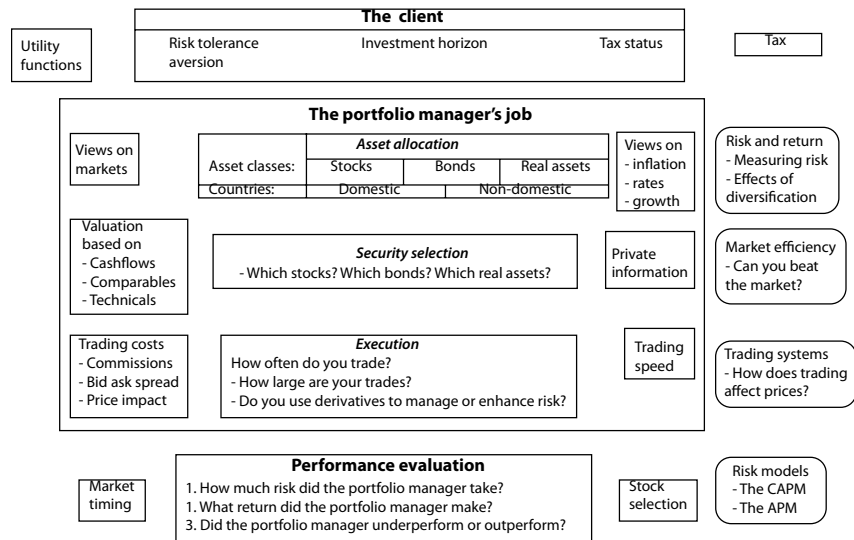
Regardless of what model is chosen, the implementation of an active investment process requires conviction and forecasting that differs from consensus. Most active investment processes have a portfolio manager or an investment team that conducts investment research to achieve the latter. The portfolio team determines strategy based on this output, invests the assets and then follows up with regular reviews of the portfolio and investment performance. The similarities between active processes end there.

The organisation of individuals within any fund management team can vary considerably. In some firms, a portfolio manager works alone. In others, they are supported by one or more analysts. When a team approach is taken, one or two portfolio managers are usually designated as lead managers. Either way, they are key to the implementation of the process and their roles need to be clearly defined and delineated.

The investment process begins with the client, as Figure 5.4 shows. The client's tax status and risk tolerance determine their investment horizon and hence choice of benchmark. The portfolio manager's job is to set the asset allocation, either between bonds and equities or between countries and sectors. The security selection then comes once the universe has been narrowed down, typically on valuation grounds. Once a portfolio has been selected, and possibly optimised, the execution completes the portfolio building process. Thereafter, the portfolio manager is responsible for maintenance and review.

Figure 5.4 Client centric investment process

Source: Stern University



Even if the fund is managed by a team, some firms like to identify a specific individual as the dedicated manager of each fund. Alternatively, there is a growing trend to report multiple manager names, just in case one leaves the team or cannot make an evaluation meeting. Experience, tenure and consistency of returns are key. Generally speaking, the longer a team has been together the better.

As can be seen from Figure 5.4, the valuation process requires models to be included as part of the investment process.

Incorporation of Models Into the Investment Process

Fund managers employ quantitative models extensively and in a variety of ways, and the investment process should document this. The fund managers themselves may use models to predict potential investment performance, to make investment decisions or to manage risks. Some firms even use models to determine a quantitative strategy that directs the investment process of the fund. Others, meanwhile, use models solely as decision-support tools.

Regardless of the use of models, what is clear is that they can be imprecise. They often fail to capture the dynamic nature of management decisions, because models rely upon false or incomplete assumptions or incorrect data, and their application is often inappropriate. Moreover, fund managers can, and often do, materially alter models.

Discounted cashflow models are the most common valuation model. This is because an asset's price is the discounted value of expected future payoffs. The formula for this is stated as follows

$$v = \frac{E(\tilde{y})}{(1+r)}$$

where v is the asset price, the discount rate is r and $E(\tilde{y})$ is future payoffs.

Although appearing precise, fund managers should be aware that major errors can occur in such models for minor reasons:

- ◆ information is often difficult to obtain and has errors in it;
- ◆ different strategies require different valuation models, whereas many firms apply one universal model;
- ◆ the basis of the inputs and assumptions used in the models are often not thought through; and
- ◆ they are not adapted to value illiquid or complex financial instruments.

For these and other reasons, robust models should be developed for the investment process that reflect the relevant factors over a wide range of potential market conditions. They should use the best available data and their assumptions should be consistent with the relevant market risk and incorporate a reasonably comprehensive set of probabilistic scenarios.

The Discounted Cashflow Model

A discounted cashflow (DCF) model is simply a more elaborate way of estimating and valuing cashflows. By applying discount rates to these, the portfolio manager creates a discounted cashflow valuation. The DCF model is based on the theory that the current price of an equity incorporates all the information about the future income generated by the stock discounted at an appropriate rate. Algebraically, assuming the stock is held indefinitely, the current price of a stock can be represented as

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \frac{D_3}{(1+k)^3} + \dots + \frac{D_\infty}{(1+k)^\infty}$$

where P_0 is the stock's current price, D_i is the expected dividend (or cashflows) to be paid in the future period i , and k is the discount rate. The discount rate k is also the investor's opportunity cost of investing in the stock and, thus, is the investor's required rate of return on equity.

Constant Growth DCF Model

If dividends grow at a constant rate, g , then the equation can be rewritten as

$$P_n = \frac{D_1}{(1+k)} + \frac{(1+g)D_1}{(1+k)^2} + \frac{(1+g)^2 D_1}{(1+k)^3} + \dots + \frac{(1+g)^{n-1} D_1}{(1+k)^n}$$

Solving for P_n

$$P_n = \frac{D_1}{(k-g)} - \frac{(1+g)^n D_1}{(k-g)(1+k)^n}$$

Solving the equation for k , on the other hand, yields the familiar constant growth, sometimes referred to as the Gordon model. This links back to the DCF model thus

$$k = \frac{D_1}{P_0} + g$$

where D_1/P_0 is defined as the dividend yield.

This model derives from the fact that the share price should be the discounted present value of future dividends. Although it is widely used, one

problem is how to adapt this model to uncertainty, which gives rise to varying share prices and dividends. In turn, this means that choosing a particular short period to estimate requirements may give misleading results.

As a word of warning, such models work very well to value certain stocks, such as utility stocks. There are some types of stock, however, that do not work so well, for example, if the stock does not have a dividend. In such an instance, all future cashflows have to be discounted. Likewise, separate models have to be created for financial and other difficult-to-value stocks.

Fed Model

Not all models are bottom up and based on discounted values. The Fed model, for example, is a top-down model. It starts with the assumption that stocks and bonds are competing instruments. The idea is then to use the yield on the 10-year Treasury bond to calculate fair value, comparing the Treasury yield to the E/P ratio (the inverse of the price-to-earnings ratio).

As an example, if the yield on the 10-year US Treasury is 4%, then fair value would be an E/P of 4%, or a P/E of 25. If the same bond yielded 5%, then the fair value would be a P/E of 20. In the first example, the market was considered overvalued if the P/E was higher than 25; the market was considered undervalued if the P/E was lower than 25.

In the Fed model, lower interest rates justify higher stock valuations, while higher interest rates result in competition for stocks and lower equity valuations. The Fed model is used at the tactical level, and often clients buy into equity mandates with passive exposure as they allocate between equity and bonds.

How To Run A Passive Investment Process

In an active investment process, all of the above models aim to achieve accurate forecasting and input variables. In a passive process, the models only really confirm what the markets determine is fair value. The latter therefore requires an investment process that indexes a portfolio to the benchmark. This approach arose because academics produced considerable evidence that past prices are of little benefit in forecasting future prices, and that fundamental data is too quickly reflected in prices to allow such data to be used for a beat-the-market proxy.

Passive management is also a lot cheaper to implement than active asset management. Also, aside from academic theory and evidence, there is a very practical advantage to passive management. Passive management, when applied to an entire portfolio, is really asset class investing.

Indexation describes the passive process of attempting to track or reproduce the performance of an index. It is a passively managed alternative that, thanks to the efficient market hypothesis, continues to grow in importance. According to a study by the Frank Russell Company, of the 73 equity managers in the top quartile in 1996, only 19 managed a repeat performance the following year, two more stayed on top for three years and just one lasted four years. After five years, none remained in the top quartile. This sort of data makes a compelling case for indexation.

The indexation process is critically dependent on high-quality information systems. It is also important to have stringent quality requirements as to the data used. There are three main types of strategy that can be adopted: full replication, stratified sampling and optimisation, which are summarised on the next page.

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- ◆ The full replication approach holds all the stocks in an individual index in exactly the same proportions as in the index; for example, a fund tracking the S&P 500 index using this strategy would hold all 500 stocks in the index.
 - ◆ The stratified sampling approach simply divides the index into groups; using these strata, a portfolio is constructed that looks very similar to the index in terms of industrial classification, but with fewer stocks.
 - ◆ The optimisation approach requires that an index manager undertake statistical analysis to identify the fundamental factors that drive stock markets, and then calculate the sensitivity of individual stock price movements to changes in these factors.
-

A fund whose objective is to reproduce the return on an index is known as a tracker fund. There is a new breed of fund called enhanced index funds that aims to bring some element of active return to this approach. Many other sorts of indexation product have also been devised by the industry.

All indexation approaches experience friction costs during index revision periods. In terms of portfolio configuration, where such funds do not perfectly mimic the underlying index, they tend to have differing returns. Such passive managers can, for example, exhibit a greater propensity to overweight stocks with higher liquidity, larger market capitalisation and higher past performance. In terms of process, it is a good idea to develop in-house systems as an aid in constructing portfolios, analytical work and reporting. Tracking error, in particular, should be closely monitored.¹

Tracking error in the performance of index funds is likely to arise from the difficulties inherent in the management of passive portfolios. Every basis point of tracking error can become a competitive issue. The difference between index fund returns and index returns averages between 5 and 25 basis points per month across index funds operating for more than five years. This comes from, among other things, the explicit costs associated with trading in securities markets, including brokerage fees and stamp duty. Another factor likely to be related to tracking error is the volatility of the underlying benchmark index. Tracking error can also arise from dividends paid by stocks in the index.

The Investment Policy Checklist

Once a philosophy and process has been bought into, it is necessary to make an investment policy checklist with the client. As has been made abundantly clear, having a structured approach to fund management is a prerequisite for success.

The investment policy checklist serves as a strategic guide to the planning and implementing of the investment process. It should cover the investment guidelines that apply to the range of funds and/or mandates managed by the firm.

The checklist should include basic considerations regarding cashflow, policy, liquidity and volatility of returns. The idea is to include basic guidelines regarding acceptable investments and investment strategies. The following is a set of questions designed to assist in the development of such a checklist.

-
- ◆ Is the investment policy fully documented?
 - ◆ What are the stated performance goals of the fund?
 - ◆ Does the policy identify the investment process and spell out how investments will take place?
 - ◆ Is the target rate of return consistent with any restrictions?
 - ◆ Are the investment parameters defined in terms of restrictions and prohibitions, or in terms of modern portfolio concepts?
 - ◆ Does the investment policy identify how it will deal with actual or potential market events (eg, bull and/or bear markets)?
 - ◆ Have all major risks been identified and taken into consideration in forming the investment policy?
 - ◆ Has the tolerable level of risk been defined by the asset manager with the client?
 - ◆ Are the processes involved in delegating the implementation of the investment policy to managers clearly defined?
 - ◆ Are benchmark criteria for determining the success of the managers clear?
-

As can be seen, the investment policy requires assignment of similar responsibilities as those defined in the investment process. This is deliberate. The investment policy checklist should cover the firm's full spectrum of strategies, the number of funds to be targeted and the risk–return targets for those funds. Often the investment policy checklist can be cross-referenced to Global Investment Performance Standards (GIPS) composites (which will be covered in more detail later in this Executive Report) and marketing material.

Conclusion

This chapter has focused on investment performance and philosophy, core concepts for any fund manager. Most investment philosophies can be broken down into a view on market efficiency and, as was explained, have to be stated upfront. Some are active, while some are passive. Either way, they all need a robust process.

If the firm believes in market efficiency in all its manifestations, it should manage index funds. Active managers obviously do not fall into this camp. Once such managers have a clear idea about how it is going to exploit inefficiencies, they have to have a clear investment process. The chapter illustrated how to do this and some of the common models used.

Although there are many valuation models, fund managers are advised to develop their own in-house version. This is because alpha generation, and hence valuation, is at the core of a fund manager's competitive advantage. The next chapter will focus on an allied topic, that of the skills and structure in the front office.

Panel 5.1 The CFA institute's asset manager code of professional conduct

Investment Process and Actions

Managers must:

1. Use reasonable care and prudent judgment when managing client assets.

2. Not engage in practices designed to distort prices or artificially inflate trading volume with the intent to mislead market participants.
3. Deal fairly and objectively with all clients when providing investment information, making investment recommendations or taking investment action.
4. Have a reasonable and adequate basis for investment decisions.
5. When managing a portfolio or pooled fund according to a specific mandate, strategy, or style:
 - a. Take only investment actions that are consistent with the stated objectives and constraints of that portfolio or fund.
 - b. Provide adequate disclosures and information so investors can consider whether any proposed changes in the investment style or strategy meet their investment needs.
6. When managing separate accounts and before providing investment advice or taking investment action on behalf of the client:
 - a. Evaluate and understand the client's investment objectives, tolerance for risk, time horizon, liquidity needs, financial constraints, any unique circumstances (including tax considerations, legal or regulatory constraints, etc) and any other relevant information that would affect investment policy.
 - b. Determine that an investment is suitable to a client's financial situation.

Notes

1. Since the aim of index funds is to replicate the performance of an index, then the difference between the return on a benchmark index and return on an index funds' portfolio – its tracking error – is used to evaluate their performance.

6

Skills and Structure in the Front Office: Portfolio Construction and Support

“The investment structure of investment management organizations needs to evolve from an asset class demarcated and regional structure, to a global skill-based structure, where there are no asset classes and no regions, and only skills.”¹ *Jan Straatman, ABP Investments*

The front office is the engine room of the fund manager. While many other functions can be outsourced or automated, the front office cannot – because it is the core of the firm. Indeed, so important is the front office that some people in the industry call it the factory. They think of it as the part of the firm where the investment performance is “manufactured”.

In addition to being the engine room, the front office is the client-facing side of the fund management firm. It is where the relationship managers or sales people reside. Within fund management companies, the trading function is also part of front office.

The front office is the key profit centre of any fund manager, and executive management are considered part of it as a result. The main focus, however, is on the analytical, construction, pre-trade and trade environment.

Regardless of whether it is seen as the engine room or the factory, there are a number of elements that ensure the smooth running of the front office. One is philosophy, followed by process, as was discussed in the previous chapter. The other elements are key variables such as those identified in the classic management book *In Search of Excellence*:

-
- ◆ structure;
 - ◆ strategy;
 - ◆ systems;
 - ◆ style of management;
 - ◆ skills;
 - ◆ staff; and
 - ◆ shared values.
-

It is not sufficient for a front office to get just one of these variables right, it is necessary to have them all in place. Indeed, they are so important that the structure of this chapter, and indeed the following chapters, is built on answering how the fund manager should address and adapt them.

Adapting is crucial. In a marketplace that rewards outperformance, underperformance is seen as unacceptable. This is especially the case in the long run. In this respect, the front office – where stock selection and portfolio construction takes place – is central to the success of any fund manager. As a result, in order for the front office to deliver, portfolio managers and analysts must work either alone or in teams according to the house style. Where they have differing approaches to alpha generation, or beta replication, differences have to be accommodated.

In terms of accommodating different approaches, and moves toward more diversified portfolios, greater innovation and increasingly efficient investment techniques, the front office remains surprisingly similar to what it has always been. What has changed is technology, methodology and terminology. Alpha, beta, volatility, tracking error and the information ratio have become standard vocabulary. Improved computer and telecommunication technologies, as well as advances in the theory of finance, are all having a dramatic impact on the shape and feel of the front office. Indeed, the increased use of derivatives and complex product structures now present the most immediate challenge to the way the front office is structured.

It is easy to talk about how to structure things in the right way. In practice, however, execution can often be poor. A firm’s own employees can usually give the best feedback on how a firm is structured, and it is good practice to survey them. For example, Table 6.1 shows how a sample of executives identified the following problems at their own companies:

Table 6.1 Common problems

Source: 2005 University of Michigan/Leadership Pulse Survey

Identifying problem (%)	Problem
35	Company’s past and habits
29	Economic climate or budget
23	Company culture
20	Way we work together
18	Senior management team
14	Customers
13	CEO/president or lack of confidence
11	Technology
9	Middle management
7	Reputation, human resource management or employees

As can be seen from Table 6.1, it is not just internal issues that are identified. External and competitive issues also arise. In this respect, theory suggests that industry competition resides in five basic forces:

-
- ◆ the intensity of rivalry among existing competitors;
 - ◆ the threat of new entrants;
 - ◆ the threat of substitute products or services;
 - ◆ the bargaining power of suppliers; and
 - ◆ the bargaining power of buyers.
-

The skills and structure of the front office should be built around addressing each of these.

Clearly, it is important to structure the front office in an optimal way. All front offices are guided by senior management, and senior management should in turn have a clear vision of the future of the business. This chapter provides some guidance on how this can be achieved.

Setting a Vision

The most important management function in the front office is to first set and then deliver on the vision of the company. Policies, mandates, portfolio construction and operations all need this important pointer to be effective.

Setting the vision is summed up by management answering the question “who does what, to whom and why?” Senior management strategy, programmes and decision-making processes should reflect and serve the vision and nothing else. In this respect, in order to be effective, a vision should be:

-
- ◆ specific;
 - ◆ measurable;
 - ◆ attainable;
 - ◆ realistic; and
 - ◆ tangible.
-

It is commonly accepted that having a corporate vision that incorporates these five variables makes a better firm than one that does not. The vision and, in particular, a fund manager’s desired achievements, should be ever present. At the same time, and always in the background, a fund manager also needs a clear sense of what its clients expect and the performance goals they expect it to achieve.

The first step in establishing a corporate vision is a clear statement of objectives. This should provide a general sense of what results are expected. It can include performance objectives, and should preferably tie into the firm’s philosophy and processes. It should be remembered that meaningful objectives go much further than simply focusing on activities and outputs, especially if the firm wants to effectively address intended impacts.

It is a good idea to focus on intended impacts, as this will make the vision more results-driven rather than activity-driven. For example, by following such an impact-based vision, the fund manager will have a clearer idea on whether to adopt technologies, become more efficient, achieve better performance or grow by acquisition. It even helps in the iterative and ongoing updating of the investment process.

Because the investment process is central to the fund management busi-

ness model, the vision should guide a firm's portfolio managers on how to produce performance. Similarly, it should also be designed to help the firm relate to and reach clients.

The management of the firm, for its part, must engage in strategic tasks and the front office focus on the products. The management must ensure they are robust, within budget and that the front office works according to the investment style. The structure, as well as measurable goals, operational and service standards, should then be built around the vision.

To illustrate how a vision is applied, let's look at the example of Nikko Asset Management, which has a clear and concise mission statement. Its mission is to provide high-quality professional investment management and advisory services to both retail and institutional clients worldwide. Its vision, "Global Expertise, Japanese Execution" leaves its staff with no doubt where its priorities are.

The reference to Japanese in the vision statement may sound inward looking, but in fact is a clever link to a set of values that the firm believes in. Values follow on from vision. They describe how a firm intends to operate on a day-to-day basis.

Values are the guiding principles by which an organisation operates, and are best expressed in terms of behaviour. Unlike a vision, which can change, values should be firmly rooted in the firm's DNA. They define an organisation and help it make decisions. In short, they ensure the front office delivers in a manner that is aligned with what the organisation stands for, regardless of whether a team or a star approach is taken.

Team or Star Manager Approach

There are two very distinct styles of front office decision-making: the team approach and the star manager approach. The team approach, as its name implies, utilises a strong team of portfolio managers and analysts to implement the investment process. The star approach, meanwhile, relies on the strengths and reputation of single managers, although the firm may employ a number of "stars" to manage different strategies. Management often prefers the team approach. This is because personnel changes are easier to handle and the track record belongs to the firm rather than the individual.

There is a larger star culture in the US than in other markets. That said, it is becoming more popular in the UK; Henderson New Star, for example, built its name in that market on the back of hiring star fund managers. This approach was deliberate. As a start-up, it had no track record. Instead, the company hired individuals who did. This highlights a key point about star managers – in the eye of the client, the track record really "belongs" to the individual, not the firm.

Not only is the team or individual important, but so is selecting the right style for them to use. While the benchmark a manager uses is rich in information, the imposition of inappropriate style benchmarks may lead to misunderstandings and is best avoided. Both team and star approaches should be aligned with their benchmark. In this respect, all businesses should have a clear vision of how the investment decision-making process is structured, and in this respect the investment team is critical.

Structure in the front office is important because there are numerous conflicts of interest and distractions that can harm investment performance. That

said, structure is also a business decision. For example, certain structures are scalable and enable the firm to grow assets under management and, obviously, profits. AIG Investments, for example, structures its investment team around a single process. This enables them to manage assets across style and capitalisation ranges, as well as across geographies, despite its member companies managing more than US\$758 billion in assets. Indeed, it even manages money from as far away as Kenya using this concept.

Multi-strategy approaches are less scalable as far as staff are concerned. In most instances, however, they are more scalable as far as the assets that can be managed. When talking about multi-strategy within a firm, however, it is interesting to note that there can also be multi-structures within the same firm. These can best be described as:

-
- ◆ Decentralised group power vs. centralised group
 - ◆ Strong departments vs. cohesiveness
 - ◆ Intellectual structure vs. flexibility
 - ◆ Risk aversion vs. risk taking
 - ◆ Top-down business process vs. bottom-up personal interests
 - ◆ Investment professional led vs. leader control
-

There is no right or wrong structure. What is important is that the fund manager knows which structure it has and ensures that all are aware of it. It is important to avoid the Icarus paradox, in which organisations are prone to failure due to an obsession with minutiae.² Whatever structure is adopted, it should be backed up with a clear organisational matrix and defined roles.

Mergers always present issues for fund management structures. Combining investment teams and investment professionals present challenges. In 2009, Crédit Agricole and Société Générale merged their fund management divisions to create the fourth-biggest fund manager in Europe and the ninth largest in the world. Amundi, their combined fund management arm, started operations on January 1, 2010. By creating this new structure, they hoped to avoid groupthink. That said, they still faced the multi-structure challenges presented above.

Avoiding Groupthink

Groupthink occurs when a homogenous, highly cohesive group is so concerned with maintaining unanimity that they fail to evaluate all information properly. There is a risk that this can happen to any fund manager. Irving Janis has defined Groupthink as a predisposition for a group to achieve consensus in decision-making at the expense of honestly assessing diverse options.³

Clearly, fund managers should avoid groupthink. It is most likely to occur when certain preconditions are met. It can occur, for example, where an investment team is highly cohesive and isolated from contrary opinions. Likewise, it can occur when an investment team is run by a directive leader who likes to make their wishes known. This can happen very easily in fund management companies. Signs of groupthink include:

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- ◆ the fund management team limits its discussion to only a few alternatives;

- ◆ the solution initially favoured by most members of the fund management team is never restudied to seek out less obvious pitfalls;
- ◆ the fund management team fails to re-examine those alternatives originally disfavoured by the majority;
- ◆ expert opinion is not sought;
- ◆ the fund management team is highly selective in gathering and attending to available information; and
- ◆ the fund management team is so confident in its ideas that it does not consider contingency plans.

A fund management team can prevent groupthink by encouraging its portfolio managers to raise objections and concerns. To do this, the investment team leader should refrain from stating his preferences at the onset of any analysis. Another good trick is to allow the fund management team to be independently evaluated by a separate group. In this respect, the review process of investment consultants and “fund of fund” managers provides valuable input.

In a similar vein to the above approaches, assigning one or more members to play the role of devil’s advocate and requiring the team to develop multiple scenarios of events upon which they are acting, with contingencies for each scenario, also works. Essentially, the fund manager should incorporate the process-driven value proposition into its daily activities.

Incorporating the Process-Driven Value Proposition into Daily Activities

With a vision, and having the philosophy and process in place, the value proposition of the fund manager becomes clear. However, it still has to be translated into the daily activities of the firm. To do this, the value proposition should be based on a pursuit of the fund manager’s “unique selling points” (USPs). These, in theory, are what differentiate fund managers in the marketplace. They should represent the benefits derived from clients who buy into the firm’s investment process.

USPs are all very well, but execution is just as important. In this respect, adequate systems of internal control must be present to ensure that investment activities are properly supervised and that transactions have been entered into only in accordance with approved policies and procedures. Internal control procedures are supervised by compliance, but in a smooth running fund management operation, they should be second nature. To achieve this, the extent and nature of internal procedures should include:

-
- ◆ reconciliations between front office and back office accounting systems;
 - ◆ procedures to ensure that any transaction rules are observed – this requires close and regular communication with those responsible for compliance, legal and documentation issues;
 - ◆ procedures for promptly sending, receiving and matching confirmations should be independent of the front office function;
 - ◆ procedures to ensure that formal documentation is completed promptly;
 - ◆ procedures to ensure reconciliation of positions are as reported by brokers to traders;

-
- ◆ seamless back office links to ensure that positions are properly settled and reported, and that late payments or late receipts are identified;
 - ◆ seamless back-office links to ensure transactions are carried out in conformity with prevailing market terms and conditions;
 - ◆ seamless compliance links to ensure that all authority and dealing limits are not exceeded, and all breaches can be immediately identified; and
 - ◆ portfolio manager and trader procedures to ensure the independent checking of rates or prices.
-

Incorporating the value proposition when it comes to macroeconomics and forecasting is complex. Even so, fund managers should consider making the generation of forecasts central to their strategy.

Forecasting should be straightforward, but models are often based on semi-subjective, semi-inconsistent, and possibly even incomplete knowledge. In order to address this, the following sequence of steps should be taken, regardless of the type of alpha generation:

-
- ◆ establish a proprietary knowledge and analytical base, aligned to the firm's investment process;
 - ◆ ensure a systematic approach to quantitative knowledge items and quantitative information;
 - ◆ integrate all qualitative knowledge items into a house model; and
 - ◆ ensure all models are uniformly and intelligently applied, eliminating inconsistencies.
-

As has been shown, proprietary knowledge must be managed. This is because fund managers should build their USPs on the back of established finance theory concepts.

Top Down

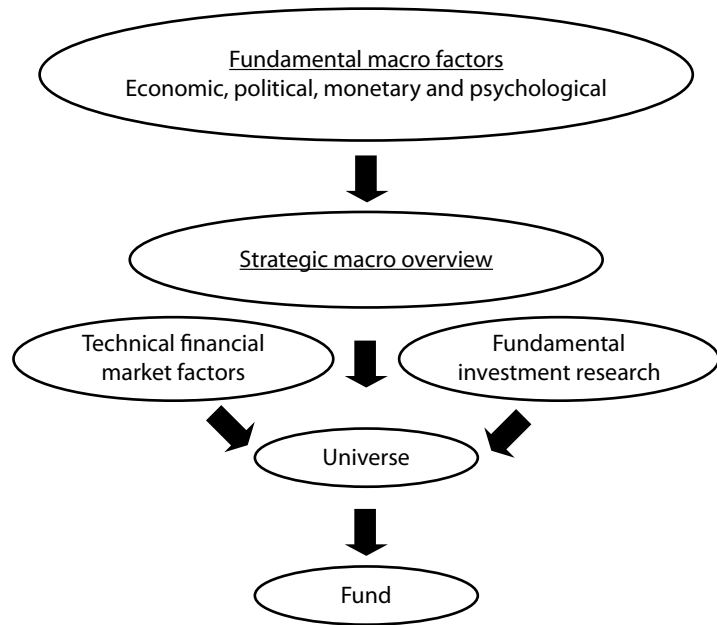
Many active fund management strategies are based on top-down processes. These begin with a look at the overall economic outlook, which is then translated into a view on sectors, industries and companies.

The structure of the front office is easily adapted to suit the top-down approach. All that is required is for the front office to have a strong macro-economic team and/or strategist at its core. The process they then pursue is typified in Figure 6.1.

The advantage of a top-down approach is that the whole firm ends up using the same forecasts to make their investment models and decisions. Obviously, a lot of emphasis has to be placed on getting these forecasts at least partially right. If this can be done, the return or alpha focus ends up coming from asset allocation, where the country and sector levels dominate.

One of the problems with the top-down approach is that portfolio managers tend to make investment decisions in a mechanical manner. Their models can be loaded with historical return data and their portfolio's selected almost automatically. It is a lot harder for this to happen when a bottom-up approach is used.

Figure 6.1 Typical top-down structure

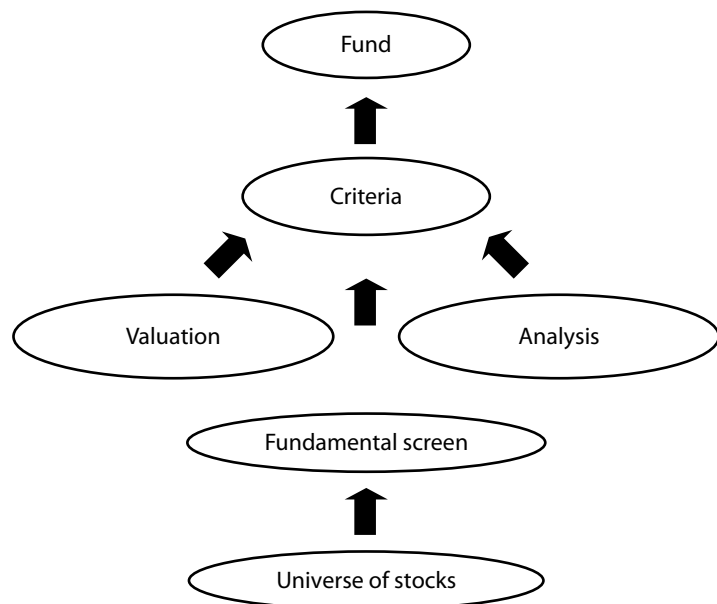


Bottom Up

The other common approach to active investment is bottom-up stock selection. This begins with the company itself.

Bottom-up fundamental analysis was first identified as an investment approach by Benjamin Graham. Another term for it is “stock-picking”. Benjamin Graham argued that paying less than the break-up value would result in portfolio outperformance, and his explanation about how to undertake due diligence is still the forerunner for modern investment analysis.

Figure 6.2 Typical bottom-up structure



The advantage of a bottom-up process is that it focuses on a single element of return, namely stock selection. On the other hand, one of the problems with the approach is that analytical work must separate the underval-

ued from companies that are just plain bad. The decline of sell-side research, largely due to an increased number of buy-side firms will no longer pay money for research reports, is putting some pressure on the sell side as the traditional approach to sourcing ideas. To compensate for this loss, the sell side now arranges company meetings with institutional clients in return for soft-dollar compensation.

Quantitative Analysis

Many aspects of the fund management process can be called quantitative. A quantitative approach is simply the use of mathematical methods to systematically capture return. That said, some whole processes are built on mathematical screening methodologies, and it is these that are termed quantitative. In a quantitative process, managers classify, screen and construct complex statistical rules.

Regardless of whether a process is quantitative, all fund managers still benefit from undertaking quantitative analysis. It plays a vital role because of the information it provides and the skills it brings to the table. It can also be used to build tools and models that assist portfolio managers, traders and clients in pricing, hedging and structuring securities. Indeed, the successful integration of quantitative methods within the front office takes on a greater significance as products in the fund management industry have become more sophisticated and trading risks have increased.

As with all purely mathematical processes, care should be taken. The industry took a warning shot across its bows during the week of August 6, 2007, when a number of quantitative long/short equity hedge funds experienced unprecedented losses initiated by the rapid unwinding of sizable quantitative equity market-neutral portfolios. Given the speed and price impact with which this occurred, it was likely the result of a forced liquidation, possibly due to a margin call or a risk reduction. The point, however, was that too many strategies were trying to do the same thing at the same time. To some extent it is easy for this to happen, as a quantitative approach clearly differs from a qualitative one but is easy to replicate.

Qualitative Analysis

A qualitative approach, on the other hand, relies on subjective skills to deliver return. There is no shortage of fund managers who claim to have the most skilful fund managers in the industry. The approach they use, however, goes a long way to explaining their returns.

The portfolio manager or analyst that uses qualitative analysis is not just relying on publicly available financial data to project future earnings, they are adding their own strategic analysis.

There are a number of analytical tools and systems that aid the qualitative process. These include:

-
- ◆ discounted cashflow;
 - ◆ probability distributions;
 - ◆ sampling and estimation;
 - ◆ hypothesis testing;
 - ◆ multiple regression;

- ◆ time-series analysis;
- ◆ SWOT analysis; and
- ◆ financial ratio analysis.

Financial ratios are calculated from one or more pieces of information from a company's financial statements. In isolation, a financial ratio is just a number. In context, however, a financial ratio can give a financial analyst an excellent picture of a company's situation and the trends that are developing.

It is possible to group ratios into categories that allow analysis of a company's finances and operations. These can be divided between:

-
- ◆ leverage ratios, which show the extent that debt is used in a company's capital structure;
 - ◆ liquidity ratios, which give a picture of a company's short-term financial situation or solvency;
 - ◆ operational ratios, which use turnover measures to show how efficient a company is in its operations and use of assets;
 - ◆ profitability ratios, which use margin analysis and show the return on sales and capital employed; and
 - ◆ solvency ratios, which give a picture of a company's ability to generate cashflow and pay its financial obligations.
-

All qualitative output will, however, depend on the quality of the inputs. In this respect, having good price and financial data systems are important.

What Systems are Required by the Front Office?

A good systems architecture in the front office is needed in order to free up the managers time to focus on the value added rather than the mundane. Gone are the days when a spreadsheet and a quick mind are all that was required.

The fund management industry has adopted widespread use of model-driven trading and algorithmic execution, in addition to real-time portfolio and risk management, All systems should, however, be able to:

-
- ◆ perform increasingly large analytical computations;
 - ◆ address spikes in capacity;
 - ◆ have high availability;
 - ◆ possess sufficient speed;
 - ◆ have Microsoft Excel connectivity;
 - ◆ be linked to a back office and administrative desktop; and
 - ◆ have a full range of global support.
-

In addition to the above, a firm's systems should provide an updated overview of holdings of cash and equities in all internal portfolios. Likewise, it should have the capacity to list all transactions and holdings. Price and information feeds are critical in order to obtain knowledge of events at an early stage. All front offices need to subscribe to such market information

systems. They provide continuous price information and other news, and also provide access to historical data.

What is often missed in fund management is that it is not just the people at front of office that matter, there are actually many touch points with the client. The servicing of accounts is as important as the optimal management of portfolios. Things like contract notes, corporate action information, statements and order processing have to be integrated into a seamless offering.

Managing and growing assets has become a challenging undertaking. In order to meet the growing demands of their customers and to cope with increasing market and regulatory complexity, fund managers are becoming more specialised in the front office and are optimising their operations around costs and accuracy. They need to significantly increase their systems coverage to meet competitive market developments. The use of compliance overlay solutions, for example, to monitor operational risks has become the norm. New, generally quite small, funds are emerging and seeking flexible, effective and affordable IT solutions to provide them with a competitive edge.

Systems also have to be able to address a new level of financial sophistication in markets. Taking positions in obscure markets, or illiquid or complex instruments, requires systems that have global reach and depth of capabilities to support the investment strategies that are likely to be deployed.

The systems aspect can be developed in-house or, increasingly, can be outsourced. A useful example of the latter is provided by RS Investments - a US West Coast fund manager. As it expanded its business beyond US domestic equities, it decided to reduce operational costs and outsource. The firm selected Charles River's fully outsourced Application Management solution. RS Investments said the system ended up as a comprehensive platform for global portfolio management and strategy analysis that helps its managers create and implement investment ideas across its many portfolios with consistency and ease. Its managers can model and rebalance their portfolios using the same tools as they use for what if analysis and order generation.

Front Office Systems Providers

There are a number of front office systems providers. Fund managers should choose the one that best suits their products and budget.

The Fidessa LatentZero Workstation is usable by any fund manager, from small hedge funds to larger institutional managers. The company works with a number of the world's leading asset managers and has developed what it calls Capstone Tesseract. This is a state-of-the-art portfolio management decision-support tool for all asset classes. The product provides easy-to-use support for many investment styles and analysis/order generation techniques, while providing integrated compliance, investment control and audit trail.

Charles River Manager produces a comprehensive platform for global portfolio management and strategy analysis. Its systems help fund managers create and implement investment ideas across one or many portfolios with consistency and ease. It consolidates all of the data, tools and connectivity required for successful and efficient portfolio management.

OpenPFA has an open architecture platform. This is useful for the smaller manager/multi-manager. It gives fund managers the tools for individual portfolio construction, including account set-up, management of transaction activity, reconciliation services and statement initiation.

Financial Models Company (FMC) supports a full suite of front-, mid- and back-office products to allow straight-through processing throughout the global fund management community. FMC has a record of leadership in the automation of fund management. Its electronic trade confirmation system is widely recognised as a leading-edge counterparty trade communication facility.

Linedata Services provides mutual and institutional fund managers with best-of-breed, front-to-back office functionality to construct, manage and market portfolios within client and corporate mandates. Its functionally rich solutions have been designed by industry experts who understand the needs of fund managers.

SunGard Investment Management Group produces Asset Arena, their global suite of solutions for the fund management industry. Offering a broad range of services traditionally associated with the front, middle and back office, Asset Arena is composed of independent software components organised into familiar business processes. The system gives access to robust portfolio management features, while scalable functionality helps accommodate the growth of a fund manager's client base.

Advent offers three different portfolio accounting solutions to cover the range of client profiles and requirements. The company also offers Advent for family offices, the industry's first fully integrated enterprise solution designed to meet the specialised investment management and reporting requirements of single-family and multi-family offices.

In a single system, SimCorp Dimension covers fund management processes across the front, middle and back office, providing exceptional instrument support, and also for exchange-traded and OTC derivatives. Fund managers can adapt the system to changes in requirements, as well as improve transparency and operational efficiency in business processes. It significantly eliminates the manual work involved in implementing investment strategies, enabling portfolio managers to concentrate on generating alpha.

What Skills Does a Portfolio Manager Require?

Clearly skills are important, and the most important of them is alpha generation. It is therefore somewhat concerning to learn that academics have repeatedly questioned the ability of active fund managers to systematically exhibit skill. Many studies claim that the net return provided by the average actively managed fund is inferior to that of a comparable passive benchmark, especially once fees are taken into account. With the growing popularity of alpha and absolute return investment strategies, there is a widening gap between the performance metrics of traditional fund management and the alternative fund managers.

Analytical skills are also important. In this respect, a fund management firm requires its portfolio managers and analysts to have high forecast accuracy. This is a function of an analyst's experience, with more experience tending to have higher forecast accuracy.

A portfolio manager should also have a number of soft skills, such as the ability to:

- ◆ present their investment ideas concisely and accurately;
- ◆ work with colleagues;

- ◆ take account of the priorities, expectations and authority of colleagues in decisions and actions;
- ◆ honour commitments made with colleagues;
- ◆ translate ideas into practice;
- ◆ always think about the market and their investments, regardless of whether at work or home; and
- ◆ handle the media.

Of course, where these soft skills are not present, there is always the possibility of training.

Training

Training is important, as is continued education throughout a fund manager's career. It is always a problem for any organisation, and in particular the training and development team, to ensure that skills and knowledge acquired on a course are not forgotten once back in the workplace. The firm should address this by:

- ◆ developing a training plan covering key company specific skills;
- ◆ developing a training plan covering job specific skills;
- ◆ ensuring that all staff are fulfilling minimum training (often a regulatory requirement); and
- ◆ sending employees to industry conferences and seminars to widen their industry knowledge and contacts.

Finding a training provider with experience and knowledge, and who also works within a similar market, is important. They should have in-depth knowledge and experience of the market and competitors, which will allow them to better customise and design learning programmes.

Another good idea is to use an external provider for the training and development programme. This brings additional professional expertise to the table, with the information imparted having a greater degree of neutrality.

Ethics and Standards of Professional Conduct

It is important to place the integrity of the fund manager and the interests of its clients above self-interest. This requires all personnel in the front office to act with integrity and have a high degree of competence. The chain of command is important in ensuring the message gets through to the weakest links.

How the Chain of Command Works in Practice

Clearly, all front-office investment teams are different, although their objective is invariably the same. They are there to meet the investment objectives of the portfolios that they manage. There are, however, commonalities. For example, there is always a lead portfolio manager. Typically, reporting lines are based on a traditional hierarchical structure of portfolio managers and analysts, and these hierarchical structures are often narrow with a centralised decision maker.

A few organisations have experimented with what is termed the network

organisation, but the danger in that is consensus decision-making and evidence suggests that network organisations do not result in outperforming the consensus.

The head of the investment hierarchy is the chief investment officer (CIO). The CIO is responsible for all the firm's performance via the formulation of individual funds' strategies and, ultimately, the investment decisions of the portfolio managers that work for him. The job of the CIO is to:

-
- ◆ carry out tasks with due regard for an organisation's policies and procedures;
 - ◆ take personal responsibility;
 - ◆ act within the limits of their authority;
 - ◆ understand the principles of effective communication and the importance of exchanging information; and
 - ◆ undertake oversight of asset classes and portfolio composition.
-

Job descriptions are covered more fully in Chapter 9. From a front office perspective however, it is worth mentioning that the role of the chief operating officer (COO) is to ensure the smooth running of the operations, settlement and systems. This includes formulating such things as:

-
- ◆ procedures for the approval of counterparties;
 - ◆ procedures for seeking approval to use new investments;
 - ◆ procedures covering front-office functions, and the measurement of compliance with any limits, oversight, control and reporting;
 - ◆ the limits to credit, market and other risks;
 - ◆ procedures for trading;
 - ◆ the professional qualifications of those entrusted with investment activities; and
 - ◆ integrating the middle-office risk monitoring with the management of portfolios, using, for example, value-at-risk (VaR) calculations or other methodologies.
-

One of the main advantages of a hierarchical reporting line is the transparency of a clearly defined promotion path that, in turn, motivates employees and encourages loyalty and staff retention. Clear lines of reporting also mean that authority and responsibility are not readily challenged. The disadvantages of this structure are that investment decisions can become bureaucratic and slow.

The focus on the front office in fund management firms can result in communication breakdowns across various parts of the firm. Typically, firms adopt human resources strategies to ensure this does not happen. One popular approach is the use of 180- and 360-degree evaluations, which are mechanisms for evaluating individual performance based on feedback from everyone with whom the individual comes in contact.

Another factor that comes into play in the industry's chain of command is that employees and ownership are often closely linked. It is widely ac-

cepted that the “principal-agent” structure of firms requires a close relation between executive remuneration and performance, but it also makes line employees into owners. It is in these tricky demarcations that personality type becomes more important.

Personality Type

Personality type is something that the front office is beginning to pay more attention to. The battle for talent is often so intense that fund managers overlook the fact that top performing managers often achieve their performance in different ways, making it difficult to construct teams or ensure consistency in process. A means of overcoming this is to analyse personality types when selecting portfolio managers.

The most commonly used method of accessing personality is the Myers–Briggs Type Indicator (MBTI), which identifies 16 models of behaviour on an action-attitude spectrum (see Panel 6.1).⁴

Panel 6.1 Myers–Briggs Type Indicator

1) E = Extroverted (expressive) or I = Introverted (reserved)
 2) S = Sensory (observant) or N = Intuitive (introspective)
 3) T = Thinking (tough minded) or F = Feeling (friendly)
 4) J = Judging (scheduling) or P = Perceiving (probing)

Based on answers to the MBTI questionnaire, one is found to be one of four function types:

Intuitive types	Thinking types
ESTJ or ENTJ (extraverted thinking)	ENTP or ENFP (Extraverted Intuiting)
ISTP or INTP (introverted thinking)	INFJ or INTJ (Introverted Intuiting)
Feeling types	Sensory types
ESFJ or ENFJ (extraverted feeling)	ESTP or ESFP (extraverted sensing)
ISFP or INFP (introverted feeling)	ISFJ or ISTJ (introverted sensing)

Fund managers tend to be either intuitive or thinking types, dependent on investment style. It is best not to be prescriptive, but senior management should at least try to align the function types with the investment process.

Investors, incidentally, can also be categorised into five types:

- ◆ planners;
- ◆ savers;

- ◆ strugglers;
 - ◆ impulsives; and
 - ◆ deniers.
-

It goes without saying that staff should be vetted – the importance of background checks should not be underestimated. Performance claims should be investigated by someone with an understanding of the attribution of the underlying portfolios.

Competence

All firms want and need competent staff, making the attracting, retaining, developing and promoting of talent a crucial undertaking. Having competent people is about having the right people at the right jobs. They should also be at the right time in their career.

The quality of decision-making is often as important as the performance results when distinguishing investment professionals. In order to ensure competence in a firm, it is necessary to be able to differentiate the cultural characteristics of the firm. This means being able to:

-
- ◆ identify the right talent;
 - ◆ ensure the right behaviour; and
 - ◆ measure effectiveness.
-

In a people-centric business, some thought should be put into key man risk. Senior management should maintain regular contact with prospective replacements for star managers.

Each and every member of a fund management firm is becoming increasingly responsible for, and in charge of, their lifelong training. It is therefore essential to establish a learning culture within companies. Very often, however, attitudes of hierarchy and roles in the company contradict such a culture of learning. Again, this is why team composition is so important.

Composition and Role of the Trading Team

As a final note, the trading team is also an important front-office function. All fund managers are under an obligation of best execution, and alpha can be lost through poor execution.

The trading team should consist of a lead trader, with specialists for each asset class. The responsibilities of the trading team include:

-
- ◆ authorisation;
 - ◆ execution;
 - ◆ confirmation;
 - ◆ settlement;
 - ◆ reconciliation; and
 - ◆ order management.
-

Any product incurs transaction costs whenever stocks are added to or deleted from a portfolio. Such costs can be minimised, particularly where

there is a pool of liquidity. That said, not every fund manager has the ability to avoid going through a broker. Unfortunately, there is significant variation in the ability of brokers to control execution costs, but this is where a good trading team comes into its own.

Although a fund manager has an obligation to seek the best execution of securities arranged on behalf of underlying portfolios, obtaining the lowest possible commission cost is a grey area. The fund manager's obligation is to try to obtain the most favourable terms for a transaction reasonably available under the circumstances.

Example of front office structuring

Some strategies undertake in-depth/fundamental evaluations of individual companies and exclude a few names from the index universe. The idea is that excess returns are expected to be positive in relation to the replicated index. One example of such a strategy is timing the index changes. When the weight of a company enters or exits an index, passive index funds, tend to implement the change at the index effective date. This behaviour creates price effects because of higher supply of or increased demand for the company. An enhanced index fund would make the change at a different time, and not the index effective date. Other opportunities arise in mergers and acquisitions where, the value of a bid is often higher than the market price of the company in question. Likewise, new issues provide some profitable opportunities, particularly when there is a good chance that the new equities will be included in the index.

International issues such as ADR and GDRs also offer random or systematic price anomalies that can be exploited. Likewise dual listed stocks where the shares have the same voting rights and underlying dividend flow, but are listed on different stock exchanges may involve temporary price difference, for instance because of difference in liquidity. Clearly, the active search for alpha is done in a traditional active way and the passive replication of the index in a more quantitative way. Enhanced index funds also tend to make use of stock lending. Their pool of stable assets, thanks to less portfolio churn, gets them a good stock lending price. This requires back office integration into the investment process.

The complexity of structuring a front office optimally can be best explained by a case study looking at a hybrid investment process between active and passive strategies. In this respect, enhanced indexing is a halfway house between active and passive investment. It is the application of strategies overlaid above an index fund in order to deliver alpha based on empirically researched inefficiencies. These strategies focus on broadly observed inefficiencies and structural changes linked to specific equities and equity markets in general.

Conclusion

In looking at the skills in the front office, this chapter has shown the importance of vision, team and implementation. A firm must get all elements of the success criteria right in order to be world class. The chapter was subtitled portfolio construction and support because these are essential to the front office. There are many soft people issues as well as hard technology issues that have to be addressed in order to achieve an efficiently structured front office.

The biggest skill to get right is “skill” itself. In this respect, fund management is a people business. Even so, good process, models and even thinking about how to put the team together all clearly help.

The next chapter will look at the middle office and its functions, especially risk and performance measurement.

Appendix 1. CFA Institute: Asset Manager Code of Professional Conduct

Trading Guidance

Managers must:

1. Not act or cause others to act on material non-public information that could affect the value of a publicly traded investment.
2. Give priority to investments made on behalf of the client over those that benefit the managers’ own interests.
3. Use commissions generated from client trades to pay for only investment-related products or services that directly assist the manager in its investment decision-making process, and not in the management of the firm.
4. Maximise client portfolio value by seeking best execution for all client transactions.
5. Establish policies to ensure fair and equitable trade allocation among client accounts.

Some strategies undertake in-depth/fundamental evaluations of individual companies and exclude a few names from the index universe. The front office structure must be adapted to accommodate this. The idea is that excess returns are expected to be positive in relation to the replicated index. One example of such a strategy is timing the index changes. When the weight of a company enters or exits an index, passive index funds tend to implement the change at the index effective date. This behaviour creates price effects because of higher supply of or increased demand for the company. An enhanced index fund would make the change at a different time, and not the index effective date.

Clearly, the active search for alpha is done in a traditional active way and the passive replication of the index in a more quantitative way. Such challenges have to be overcome.

Enhanced index funds also tend to make use of stock lending. Their pool of stable assets, thanks to less portfolio churn, gets them a good stock-lending price. This requires back-office integration into the investment process. Clearly front, middle and back office are closely related in any fund manager.

Notes

1. Pranay, Gupta and Jan Straatman, 2006, “Skill-Based Investment Management: The Next Evolution in the Asset Management Industry”, *Journal of Investment Management*, 4(1), pp. 4–21.
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3. Janis, Irving L., 1972, *Victims of Groupthink: A Psychological Study of Foreign Policy Decisions and Fiascoes* (Boston: Houghton Mifflin).
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7

Skills and Structure in the Middle Office: Risk and Oversight

“The process of selecting a portfolio may be divided into two stages. The first stage starts with observation and experience and ends with beliefs about the future performances of available securities.” *Harry Markowitz*

The middle office provides operational support to both portfolio construction and analytics. Its role overlaps with the front and back office, typically covering the trade flow through to cash management and risk oversight of portfolios. Its function is to provide the analytical, risk and administrative back-up to ensure the firms’ funds and/or mandates are within their investment guidelines.

The middle office largely focuses on the reporting and controlling function of investments. Its staff calculate a wide range of risk measures, such as tracking error, value-at-risk (VaR), beta and volatility.

The core teams within the middle office are typically:

-
- ◆ risk management;
 - ◆ trade support;
 - ◆ data management;
 - ◆ new projects;
 - ◆ cash management;
 - ◆ vendor oversight; and
 - ◆ manager transitions.
-

It is often asked why the middle office is necessary. Its function was traditionally the responsibility of the chief investment officer (CIO), because return is a function of risk. Many people see its existence as a duplication of resources. I think it is best to see it as a check and balance.

The middle-office role evolved into a unique skillset – and even a separate function – within the firm. Poor performance can come from many dif-

ferent areas, which quantitative methods are better able to assess. As under-performance is the most significant risk that a fund management firm faces, such a separation of functions is often now seen as best practice.

Typical quantitative techniques used by the middle office include:

-
- ◆ stress testing or scenario analysis;
 - ◆ analysing the sources of risk;
 - ◆ analysing tail or extreme risk; and
 - ◆ using multiple horizon models.
-

Allied to the earlier question, many also ask why the middle office is not a function of either the back or the front office? This is harder to answer. The front office is all about creating performance, the middle office is all about the preservation, reporting and decomposition of that performance. Producing risk analytics and attribution requires a structured approach. The trick is to integrate this structure with the rest of the firm.

Integrating the Structure of the Middle Office With the Rest of the Firm

Integration within the firm often depends on how the investment process and the marketing is structured. The middle office generally has risk managers, as well as the risk controllers and performance analysts. The former tend to integrate more with the investment process, the latter with marketing.

The risk office is generally given the power to undertake a complete audit trail for monitoring, analysing and controlling the front office. In about 40% of firms, the risk manager's role receives slightly more weight in the investment process, with the middle office having some sort of veto power at the product level.

As has been previously mentioned, fund management is a business that produces numbers. In this respect, the middle office is a key player because it is responsible for performance analysis. In well-structured firms it works with portfolio managers to help them understand the sources of their return and risk. Even if the middle office does not have veto power, it often indirectly impacts investment decisions through its ability to escalate issues to the investment team.

A good middle office should:

-
- ◆ maintain overall oversight of the risk framework and the major risks facing the firm and its portfolios;
 - ◆ maintain and further develop the firms' and its funds' operational risk management framework;
 - ◆ assist with business management as it relates to the system of internal controls and performance risk assessments;
 - ◆ process risk reviews;
 - ◆ determine key risks, risk indicators and recommend minimum control standards; and
 - ◆ ensure the continuous monitoring of funds according to any regulatory restrictions.
-

In support of the above, the methodology of middle offices is often built on the main approach to portfolio risk assessment, namely modern portfolio theory and the mathematical relationship between risk and return. That said, using modern portfolio theory as a risk framework does require a degree of caution. Equity returns exhibit a degree of skewness that is inconsistent with what is often taught as normal or standard distribution. Equity returns are better described as log normal, and a good middle office should have systems and software that can handle such statistical distinctions.

As much as methodology is important, it is the managers that require oversight. In fact, it is not just the managers that need oversight, but the portfolios as well. In this respect, the middle office should be structured for good oversight of client-imposed guidelines and constraints. Despite being given active, or even passive, mandates, many managers are subject to restrictive constraints. Often, for example, managers are only allowed to deviate from their benchmark within certain bounds.

As a result of such restrictions, middle office should be equipped to monitor tracking error, a measure of how much the return on a portfolio deviates from the return on its benchmark index. Likewise, it should have procedures in place to signify when things change, such as for example, a major index re-balancing.

In structuring the middle office, senior management should understand that risk techniques are often complex and black box in structure. The output of middle offices can be difficult to interpret and communicate to fund managers. One way to address this is to follow the suggestions of the International Standards Organisation, that the risk management function should:

-
- ◆ be an integral part of organisational processes;
 - ◆ be based on the best available information;
 - ◆ be capable of continual improvement and enhancement;
 - ◆ be dynamic, iterative and responsive to change;
 - ◆ be part of decision-making;
 - ◆ be systematic and structured;
 - ◆ be tailored;
 - ◆ be transparent and inclusive;
 - ◆ create value;
 - ◆ explicitly address uncertainty; and
 - ◆ take into account human factors.
-

In order to achieve these various goals, the middle office has to produce regular transaction, exposure and risk-attribution reports. These should include such things as the upper and lower bound weightings for individual securities, sector and asset class exposures. It should also have some idea or similar constraints for other categories of securities, such as growth, value and small capitalisation stocks.

In addition to risk oversight and performance measurement, the input from middle office is particularly useful during the product/portfolio design phase and discussions with portfolio managers on setting of risk limits and validation of new instruments.

A middle office is only really integrated if it produces accurate and time-

ly information. This information should be calculated on a frequent, even daily, basis. Historical performance deviations can, after all, be used as predictors of future relative risk, assuming past risk levels persist in the future. As a result, the middle office should also conduct thorough risk oversight of process implementation.

Risk Oversight of Process Implementation

A key concept behind the middle office is to have risk oversight of process implementation. This means it has to drill down to the portfolios and analyse the facts. To do this it needs to provide a real-time interface whereby profit/loss and market risks can be assessed. Such interfaces can either be bought or developed internally, depending on the complexity of the fund manager.

The risk oversight should extend to a focus on risk controls, monitoring resources and ensuring the portfolio managers can respond to unforeseen market events. In this respect, it is good practice for the middle office to have weekly investment meetings and reports with, or directed at, the investment team. Such reports should highlight changes to industry, economy and theme factor exposures.

The weekly report should be concise but be able to illustrate how a fund manager has changed their portfolio relative to the benchmark over the preceding week. The objective should be to highlight changes in portfolio biases that may have a material impact on the overall risk of the fund. The risk review report documents exceptional changes to portfolio and factor risk by considering:

-
- ◆ changes to overall portfolio risk;
 - ◆ increases/decreases in sector biases;
 - ◆ increases/decreases to factor exposures;
 - ◆ reviews of risk and concentration limits; and
 - ◆ strategy objectives/a macro view.
-

The goal is to ensure that portfolios are managed according to guidelines and are consistent with the clients' risk appetite and tolerance. The ability to monitor rapid changes in risk is another main component of this area. Hedging and overlays can then be used to respond to changes in the investment environment.

Another useful product of the middle office is the daily transactions report. This document is key to implementation of the control function in the middle office. In most fund management organisations, a list of trades completed the preceding day is generated each working day and placed on senior managers' desks. The daily transactions report has the ability to highlight any significant changes to the macroeconomic and specific risk exposures that are caused by transactions effected the preceding day. It should be noted that only those changes deemed to be of material interest should be reported. Producing numbers for number's sake is futile.

Obviously, all the reports produced by the middle office are working documents, apart from perhaps the half- and full-year fund reports. The primary objective is to be concise yet succinct. The output should be factual and not attempt to assess individual trades. It is counterproductive to pro-

duce voluminous data. Purchases and sales that are not significant in their own right, and have no material impact on a portfolio's exposure to the risk factors, should not necessarily be flagged up. To achieve this objectivity:

-
- ◆ regular analysis should be conducted to allow prompt attention to problem areas that may otherwise only be revealed by poor performance;
 - ◆ controls and procedures must be consistent with the overall philosophy and operations of the organisation;
 - ◆ the layers of control must be comprehensive and allow aggregation into an overall monitoring process, both in absolute terms and, where appropriate, relative to competitors; and
 - ◆ timely analysis should be enacted to help to isolate any issues.
-

It should be pointed out that all asset classes are different. In this respect, bonds require different risk measures. In addition to maturity monitoring, risk can be controlled by constraining the portfolio duration relative to that of the benchmark index. To reduce yield curve risk, the convexity of the portfolio can be monitored in a similar way.

In addition to monitoring different asset classes, the middle office should have a strategy for the oversight of derivatives. The value of such instruments depends on the underlying variability of the asset to which they relate and, as such, they present unique issues. Indeed, their value can also be affected by many factors that portfolio managers are not accustomed to measuring, such as changes in the expected future volatility of the related asset.

Risk Oversight in Product Development

At the product design level, the middle office has a number of risks that market-orientated products have to address:

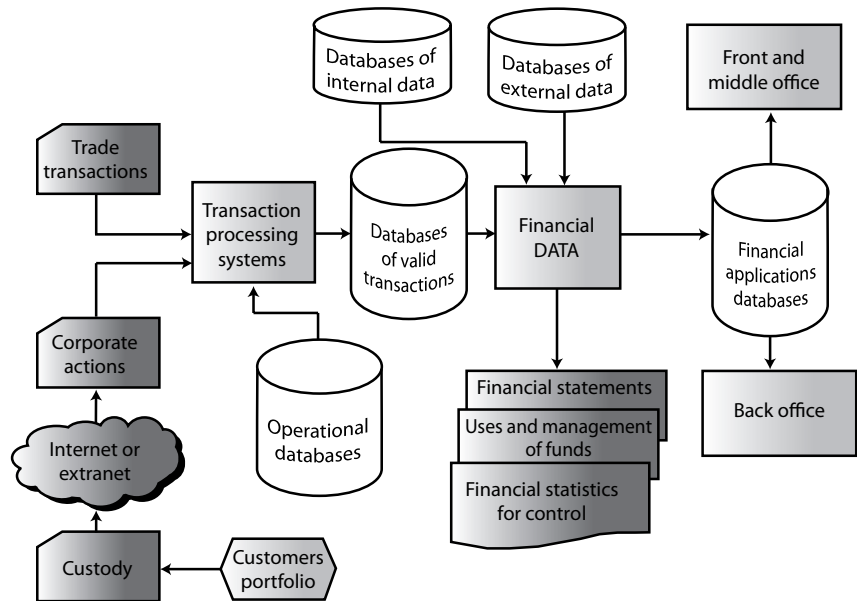
-
- ◆ market performance risk;
 - ◆ health care risk;
 - ◆ inflation risk;
 - ◆ longevity risk; and
 - ◆ interest rate risk.
-

These risks highlight the changing nature of how the client views risk. Conventional investment classes no longer provide some clients with the tools they need to match assets with liabilities. The middle office should try to help fill this gap, as it gets the fund manager closer to the client. To do this, it should have a comprehensive array of risk and performance systems.

Middle-Office Risk and Performance Systems

Middle-office systems should revolve around portfolios and GIPS-segmented groupings. Central to all middle-office systems should be the database. This has to be robust and scalable. The output of any systems, namely daily profit/loss, market risks and counterparty risks, should ideally be all calculated in real-time or with one-day lag. A typical database structure is shown in Figure 7.1.

Figure 7.1 Database structure



In addition to a robust database, the minimum systems a middle office should have are:

- ◆ the ability to monitor hard/soft limits on certain sources of risk (ie, concentration limits such as sector limits, and asset class risk budget allocation limits);
- ◆ the ability to produce exposure, contribution and attribution reports;
- ◆ the ability to produce risk reports, including tracking error, diversification of the portfolio and portfolio characteristics;
- ◆ the absolute oversight of risk and/or tracking error targets or limits;
- ◆ position reporting;
- ◆ risk management systems, typically factor based; and
- ◆ systems that oversee the use of leverage.

The output of a firm’s systems should be able to be viewed at all consolidation levels, down to the individual stock level. The staff should be able to analyse these by contributions to risk and result.

Panel 7.1 Portfolio Analytic Providers

- ◆ Barra delivers an integrated suite of equity investment analytics modules, specifically designed to manage your equity risk against expected returns. It also enables construction of optimised portfolios and backtesting.
- ◆ Bloomberg has a portfolio analytics and risk solution that offers a growing suite of sophisticated tools, such as performance attribution, characteristic and scenario analysis, with analytics that measure a portfolios performance against a benchmark.
- ◆ Interactive Data Corporation produces BondEdge, a suite that allows fixed income institutional investors to proactively manage global interest rate and credit risk at the portfolio level.

- ◆ Morningstar produces an investment database and analytics tool designed for competitive analysis, performance evaluation, investment selection and portfolio creation.
- ◆ Thomson Reuters has a portfolio analytics that delivers multi-currency performance attribution and sophisticated portfolio profiling.
- ◆ Wilshire Associates delivers a complete global equity portfolio management analytic solution.

In addition to portfolio analytics, fund managers are required to follow the regulators requirements on senior management arrangements, systems and controls. That means they must take reasonable care to establish and maintain such systems and controls as are appropriate to its business. Such standards are high level and obviously flexible. They aim to cover effective systems and controls for business models that span a very wide range. This means the fund manager should have systems that cover:

- ◆ its funds' full history, including all holdings and transactions;
- ◆ each fee, commission and trading detail;
- ◆ fund or mandate categorisation and supporting information, evidence of dispatch to client of any notice and a copy of the agreement entered into;
- ◆ records and accounts to enable the fund to distinguish financial instruments held for one client from those held for another and the firm's own;
- ◆ data relating to transactions in financial instruments, including the identity of the client and information required under the Money Laundering Directive; and
- ◆ a full set of analytical and monitoring tools.

In providing its service to the firm, the middle office is supported, however, by a myriad of tools. The key tools, factor models and optimisation software, are now de rigeur.

Using Factor Models and Optimisation Software

Optimisation is widely used by the middle office to aid the front office in the portfolio construction process. In contrast to other portfolio construction techniques, optimisation provides a unified framework that takes into account clients' goals and requirements. Once again, this part of the fund management process comes back to the risk–return trade-off, formalised by modern portfolio theory and, more specifically, customised factor models.

Some people argue that factor models and optimisation tools are valuable if used to define a portfolio based on risk aversion. In other words, using a parameter that reflects a preference *vis-à-vis* the risk–return trade-off. The optimal portfolio, after all, maximises the risk-adjusted return. The resulting utility function can be stated as

$$\text{Utility function} = \text{portfolio return} - \text{risk aversion} * \text{portfolio variance}$$

Using this utility function it is possible to directly select an efficient portfolio that maximises return for a given level of risk, by focusing on so-called factors.

According to Ross and Roll (1984), five key economic factors account for more than 95% of the systematic risk present in the stock market. These are:

-
- ◆ unanticipated changes in the term structure of interest rates;
 - ◆ interest rate projections;
 - ◆ the long-term rate of inflation;
 - ◆ the business cycle as measured by the level of industrial production; and
 - ◆ the market risk premium as measured by the spread between high-grade and low-grade corporate bonds.
-

One advantage of using such tools is the absence of a parameter choice requirement. The portfolio manager simply inputs the acceptable or desired level of risk. This can make the portfolio construction process more intuitive and transparent to some users. To others, it is a black box approach that can potentially harm stock selection decisions. Regardless, as with most things in fund management, data quality is paramount.

Data Quality

As said, data quality is critical. It should be complete, valid, consistent, timely and accurate, and appropriate for middle-office use. When such data has inaccuracies, it is termed dirty data. Clean data and analysis should be produced within five business days.

The development of new, exotic and often illiquid financial instruments has resulted in many financial assets that are difficult to value and price. The other thing to watch is the length of statistical data on which observations are being made. For example, commentators assert that statistical proof of skill requires an analysis extending over at least 15 years of observation periods (Urwin 1994). That's a long time to wait to validate data.

The development of increasingly complex derivative instruments is now a fact of life. Many of these instruments trade over-the-counter (OTC) rather than in an exchange, and there is little information and disclosure about such instruments available for asset managers who want to be fully transparent. Going forward, the challenges facing data quality are only going to get tougher.

Monitoring Style Drift

The middle office is essentially the style policeman. Style drift is an intentional or unintentional departure from the investment process, and a resulting difference in the way a fund is capturing return. In this respect, the middle office is also the performance oversight policeman. After all, poor fund performance is the most significant risk an investment management firm faces. There are many further risks to the firm, such as operation and legal risk, but these are not in the style domain. The middle office has to adequately monitor style drift.

The degree of adjustment varies with the frequency over which the drift is measured, with funds being most responsive to changes in book-to-market

and momentum drift. Certain types of style drift affect portfolio turnover. As a result, the design of middle-office style systems and controls framework should be designed to capture this.

Senior management need to be assured that the risks taken by portfolio managers are consistent with those of the firms' investment style and processes. In other words, it is a framework that facilitates the constant supervision of fund managers in a simple manner. A second objective is to enhance fund managers' understanding of their portfolios' style characteristics and help them to construct portfolios accordingly.

Warren Buffett commented on the challenges of style drift at his firm Berkshire Hathaway. "The giant disadvantage we face is size", he claimed, "In the early years, we needed only good ideas, but now we need good big ideas. Unfortunately, the difficulty of finding these grows in direct proportion to our financial success, a problem that increasingly erodes our strengths."

If portfolio managers are able to understand the style framework, then they will see the middle office as an aid to fund management. Similarly, ease of practical application by fund managers will facilitate its inclusion in portfolio design. Once again, it all comes back to the staff, skills and shared value in the firm.

Staff, Skills and Shared Values

The middle office should be staffed by skilled and sufficiently qualified personnel. To facilitate middle-office objectives, not only must analysts be skilled but there must also be defined lines of responsibility to the investment team. In this respect, middle-office staff need to understand:

-
- ◆ the portfolio risk–return objectives;
 - ◆ how to measure the progress of a portfolio against benchmarks and indexes;
 - ◆ how to provide effective feedback on performance; and
 - ◆ an organisation's requirements relating to the application of codes, laws and regulatory requirements.
-

The Professional Risk Managers' International Association (PRMIA) is the largest middle-office standard setter. It is an open forum for the promotion of sound risk management standards and practices. PRMIA's objectives are to:

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- ◆ be a leader of industry opinion and a proponent for the risk management profession;
 - ◆ drive the integration of practice and theory, and certify the credentials of professional risk managers;
 - ◆ connect practitioners, researchers, students and others interested in the field of risk management;
 - ◆ be global in focus, promoting cross-cultural ethical standards, serving emerging as well as more developed markets; and
 - ◆ work with other professional associations in furtherance of PRMIA's mission.
-

Candidates are required to pass the following four exams to achieve the PRM Designation.

-
- ◆ Finance Theory, Financial Instruments and Markets.
 - ◆ Mathematical Foundations of Risk Measurement.
 - ◆ Risk Management Practices.
 - ◆ Case Studies, PRMIA Standards of Best Practice, Conduct and Ethics, Bylaws.
-

Middle-office staff also have to share the same values as the rest of the firm, even if they are not so performance orientated. After all, they have partial responsibility for operational risk.

Panel 7.2 CFA Institute: Asset Manager Code Of Professional Conduct - middle office provisions

Risk Management, Compliance, and Support

Managers must:

1. Develop and maintain policies and procedures to ensure that their activities comply with the provisions of this Code and all applicable legal and regulatory requirements.
2. Appoint a compliance officer responsible for administering the policies and procedures and for investigating complaints regarding the conduct of the Manager or its personnel.
3. Ensure that portfolio information provided to clients by the Manager is accurate and complete and arrange for independent third-party confirmation or review of such information.
4. Maintain records for an appropriate period of time in an easily accessible format.
5. Employ qualified staff and sufficient human and technological resources to thoroughly investigate, analyse, implement and monitor investment decisions and actions.
6. Establish a business continuity plan to address disaster recovery or periodic disruptions of the financial markets.
7. Establish a firm-wide risk management process that identifies, measures and manages the risk position of the Manager and its investments, including the sources, nature and degree of risk exposure.

Responsibility for Operational Risk

Operational risk has risen in importance with the increase in financial complexity. It is largely the responsibility of the chief operating officer (COO) and is a back-office responsibility. That said, the middle office also has the tools and support that can assist in this process.

Regulatory accords on operational risk, such as IAS 39, Basel II and SOX (Sarbanes–Oxley), need to be adhered to. There is risk in non-compliance with regulations, and the middle office (or legal and compliance departments) should ensure it is up to speed on the following:

-
- ◆ IT tools that ensure compliance with requirements;
 - ◆ written procedures;
 - ◆ internal control function supervision that monitors legal and regulatory developments;
 - ◆ procedures to avoid breach of contractual provisions;
 - ◆ monitoring of covenants;
 - ◆ back-up for IT system failures and/or material errors caused by employees;
 - ◆ implementation of disaster recovery procedures; and
 - ◆ service level agreements (SLAs).
-

Middle office staff have recently become more responsible for monitoring liquidity. Liquidity is now a concern for many fund managers. During the 2008–2010 credit crisis, fund managers faced liquidity issues in the form of redemptions and problems with pricing illiquid instruments.

Liquidity risk issues are difficult to define, and plan sponsors and clients do not completely know what they are looking for. One way to address this is to monitor day trading volumes to determine days needed to trade out of position. There are, however, bigger challenges with assessing liquidity for many bond instruments, as new structures can cause significant problems.

Panel 7.3 The Three Pillars of Operational Risk

Basel II

Although written specifically for the banking industry, Basel II improves the overall framework in the asset management industry to the risk of credit losses generally by requiring higher levels of capital for those borrowers thought to present higher levels of credit risk, and vice versa. The heart of Basel II is knowledge.

Essential elements of operational risk are data capture, reporting and analysis of credit, market and operational risk, and then mitigating perceived risks through business processes, whether automated or performed physically. Options are available to allow banks and supervisors to choose an approach that seems most appropriate for the sophistication of a bank's activities and internal controls. These are called the three pillars of operational risk

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- ◆ Pillar 1 aligns the minimum capital requirements more closely to actual risk of economic loss.
 - ◆ Pillar 2 recognises the necessity of exercising effective supervisory review of internal assessments of their overall risks to ensure that management is exercising sound judgement and has set aside adequate capital for these risks.
 - ◆ Pillar 3 leverages the ability of market discipline to motivate prudent management by enhancing the degree of transparency in public reporting. It sets out the public disclosures that banks must make that lend greater insight into the adequacy of their capitalisation.
-

Responsibility for Business Continuity Risk

Business continuity is important. Indeed, it is a requirement that applies to all fund managers and financial industry participants. The ultimate responsibility for business continuity management, not unlike the management of other risks, rests with a fund manager's board of directors and senior management. That said, as a numbers business, it is essential that the database and historical records maintained by the middle office are backed up so that they can be restored after any crisis.

The middle office should explicitly consider and plan for major operational disruptions. Data is at the core of the fund management business and its preservation in the event of a business disaster is paramount. Because the steps necessary to improve the resilience of the financial system may be more costly than the steps fund managers generally choose to undertake on their own, financial regulators normally require such back ups to be in place.

Middle offices should incorporate business continuity management reviews into their frameworks for assessing overall firm-wide risk.

Preparing a Business Continuity Plan

All fund managers should have a good business continuity plan. The terrorist attack on Wall Street showed just how important this is. The first element in establishing a business continuity plan is the responsibility list. It is no good having a plan and no one knows what they are supposed to do to effect it. A risk officer is a good person to entrust with the business continuity plan. They should keep a list of who has a copy of the plan and where each copy is held.

In order to develop a business continuity plan, it is necessary to have a thorough understanding of the fund management business. This involves knowing the critical functions, the effect of those functions being disrupted and the priority for recovery of those functions. This process is known as a business impact analysis, and is the reason the plan should not be the sole responsibility of the personnel department (although clearly fire evacuation and other issues are in their domain).

Portfolio managers, settlement and trading are examples of critical functions. The importance of the function and how quickly each function must be re-established should be detailed. For each of the time spans, the plan should identify what the effect of the loss of the critical function would be. For example, the disruption to the front office could also have the following affect:

First 24 hours

- ◆ missing investment opportunities

24 hours–48 hours

- ◆ company reputation damaged
- ◆ portfolio cash positions disrupted by inflows/outflows

Up to one week

- ◆ financial implications due to missed deadlines
- ◆ need to outsource portfolio oversight

Up to two weeks

- ◆ loss of customers to competitors
 - ◆ temporary or permanent reduction in staff numbers
-

For each time span, the plan should detail how many staff are needed and what resources are required, such as computers (both hardware and software). Likewise, list what data is essential to the maintenance of the portfolios and other critical functions, including customer contact. Some thought should be put to the resources required for recovery. This should be done in collaboration with the IT department. Staff can now work remotely when IT systems are restored, but should be assembled as soon after an emergency as practical.

The primary concern of the middle office is risk. In the context of disaster recovery, risk is a statement of the chance of something happening that will impact the firm's business objectives. Risk is normally considered in terms of likelihood of a hazard affecting the business. By assessing risks it is possible to prioritise your risk reduction activities.

There are many hazards that may disrupt the business, including:

-
- ◆ flooding;
 - ◆ IT failure/loss of data;
 - ◆ utility failure;
 - ◆ fire or explosion;
 - ◆ transport accident;
 - ◆ extreme weather;
 - ◆ loss of premises; and
 - ◆ staffing issues.
-

These hazards should be listed, including the physical disruption that may be caused and the financial implications of this disruption. Similarly list people affected by the disruption (staff, clients, partners, etc). If the emergency services are called, the firm has to appoint someone to act as a liaison officer. This person needs to pass information between the emergency services response and the internal response team.

It is essential to keep staff informed regarding the emergency and the response actions being taken. Staff can be concerned about:

-
- ◆ colleagues who may be injured;
 - ◆ what is expected of them today;
 - ◆ should they turn up for work tomorrow; and
 - ◆ will there be a job for them if the building has gone up in smoke, etc.
-

The client and media-facing staff should work in collaboration with the emergency services media officer. It is important that, once a plan is in place, it is tested. Before that can happen, it is crucial that staff become familiar with the content of the plan and their role in the response and recovery.

Counterparty Risk

Counterparty risk is again normally a function of the back office; however, the middle office is generally better positioned to evaluate it. This is because, in order to keep a check on counterparties, it is necessary to measure and set limits to mitigate credit risk, which can be done using estimation techniques. The objective is to evaluate the initial collateral and model the results of any potential problem situation. The middle office should therefore assist by:

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- ◆ estimating potential exposure based on a realistic market model that incorporates risk reduction;
 - ◆ establishing risk mitigating arrangements;
 - ◆ establishing and performing stress test evaluations of counterparty credit;
 - ◆ establishing comprehensive limit structures relating to pre-collateral exposures;
 - ◆ establishing comprehensive limit structures relating to estimated liquidation exposures; and
 - ◆ establishing comprehensive limit structures relating to potential exposures.
-

It should be noted that counterparty risk exposures occasionally extend to products as well as trading entities. This is particularly the case where exposure to asset classes is synthetic or structured.

In addition to the risk function, the initial credit evaluation should include:

-
- ◆ material financing and counterparty relationships;
 - ◆ specific trading and investment strategies and asset allocations;
 - ◆ operating controls, including valuation procedures, processing and settlement procedures, trade verification and margining procedures and collateral management procedures; and
 - ◆ information on risk management approach and controls, as well as risk measurement methods and risk measurements.
-

Counterparty evaluation is often done as a one-off. This is dangerous – it should really be an ongoing analysis of:

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- ◆ capital condition;
 - ◆ performance;
 - ◆ market risk;
 - ◆ asset liquidity risk and funding liquidity risk assessments; and
 - ◆ material events.
-

As a caveat, it should be pointed out that the distinction between market risk and credit risk is not clear. Changes in foreign exchange rates, interest rates, equity prices and spreads, as well as in volatilities and correlations, are all – as in portfolio risk control – key determinants.

Portfolio Risk Control

Portfolio risk control is central to the middle-office function. Fund managers with a fully integrated risk and portfolio management process have a competitive edge. To achieve this, the middle-office portfolio risk control should be designed for:

- ◆ accommodating changes in investment philosophy or process;
- ◆ capturing securities held outside of mandate;
- ◆ compliance or regulatory issues;
- ◆ counterparty and liquidity management;
- ◆ delivering qualitative, forward-looking risk assessments;
- ◆ identifying the underlying drivers of risk and return across asset classes and complementing quantitative risk measures;
- ◆ measuring manager turnover;
- ◆ stress testing and extreme risk measurement capabilities;
- ◆ the ability to detect deterioration in performance;
- ◆ the ability to detect style drifts; and
- ◆ transparency.

A benchmark market index is normally the starting point against which performance is continually compared. Explicit constraints take the form of legislative controls that prescribe minimum requirements for the various categories of trusts. Business success can depend crucially on peer group ranking.

As a caveat, it should be pointed out that when the middle office presents any claim of outperformance against a benchmark, it should be understood that statistics have their limitations. From a quantitative viewpoint, a fund that consistently outperforms requires statistical proof of skill extending over at least 15 years to prove it is skill and not luck.² In any actively managed fund, there is a chance that the manager will make some good or lucky decisions and thereby outperform the relevant index or benchmark. On the other hand, there is also a chance that they will get unlucky or make mistakes, thereby causing the fund to underperform.

In addition to evaluating performance risk, middle-office portfolio risk control involves an understanding of which factors are driving current returns. This means knowing what alpha strategies are working, what risk factors are influencing returns (correlations) and what the sector-style interactions are.

The middle office should provide an insight by decomposing portfolio variance, and explaining unexpected tracking error, systematic versus idiosyncratic risk, a whole host of risk measures and by identifying the firms' risk-maximising positions.

Panel 7.4 Risk Measures

A number of methods to assess portfolio risk can be used. Some of these produce *ex-post* risk-adjusted returns but can be modified to assess *ex-ante* risk–return attributes. Some measures are listed below:

- ◆ Jensen: the expected return on a portfolio in excess of the risk-free rate divided by the portfolio beta.
- ◆ Kataoka: the portfolio return that can be achieved with a given

level of confidence.

- ◆ Roy: the probability of producing a return below a nominal (or benchmark) rate.
- ◆ Sharpe: the expected return in excess of the risk-free rate divided by the standard deviation of return.
- ◆ Sortino: the expected return in excess of the minimum acceptable return, divided by the downside risk; downside risk is the square root of the probability-weighted squared deviations of those returns falling below the benchmark rate.
- ◆ Telser: the expected portfolio return, but only for portfolios with a probability of achieving a benchmark return with a given level of confidence.

In addition to the above, sometimes portfolios are also evaluated on a VaR basis or relative to their tracking error. Before identifying the appropriate risk measure, it is necessary not only to consider these different concepts of risk, but also the objectives of the investor. Objectives for investment funds can be set in a variety of ways. Most commonly, they are specified in the investment contract, as well as in any associated marketing literature.

There are a number of fairly standard portfolio risk controls that all managers should design into their process, with or without a middle office. The first is to set the value of a single stock within a portfolio. Likewise, there may also be a value of a single stock that drops below a minimum acceptable level. In such situation, the manager would have to decide to either further accumulate, thus raising the stock's value in their portfolio, or sell the stock from the portfolio.

Backtesting and Stress-Testing Portfolios

There are a number of specialist, bespoke tasks that the middle office can perform. One of these is backtesting, which is used to test strategies and generate a view of what a return series might have looked like (often for marketing purposes).

Backtesting is a simple and transparent method of testing the validity of the results from mean-variance risk analysis. The simplicity often leads to a greater appreciation of the mean-variance technique (and its limitations):

- ◆ backtesting a robust strategy is likely to demonstrate consistent profitability across various instruments;
- ◆ backtesting a strategy on a number of instruments is more likely to reveal any shortcomings and helps to avoid over-optimisation;
- ◆ backtesting a strategy on a single instrument may not produce enough trades to distinguish a pattern; and
- ◆ by backtesting on a diverse portfolio, the instruments most suitable for the particular trading strategy can be selected.

The use of backtesting can quickly improve a fund manager's appreciation of risk analysis. It should be appreciated that the results are not inherently accurate, as a consequence of the sophistication of the mathematical technique. Clearly, decisions would have been made that make the backtested portfolio purely hypothetical, because they depend on the particular events that occurred over the chosen period of analysis. That said, the data the middle office produces should give portfolio managers insights that they can use to facilitate a fuller discussion and more appropriately apply its results.

Stress testing and scenario analysis are essential tools for firms' planning and risk management processes. By using stress testing and scenario analysis, senior management can assess and adjust their view of the risks that face their firm, plan mitigating action and identify risk concentrations - or indeed what the competitors are up to.

Undertaking Competitor and Peer Group Analysis

Performance success is aided by beating the competition and, as such, the middle office is often charged with monitoring competitor funds. Indeed, the comparison of fund returns with a competitor's is the most common method of evaluating fund performance at the firm level.

There are many biases in peer groups, some of which can be controlled. Peer group providers establish rules for classifying managers as large or small, and value or growth, and then populate their peer groups with managers that meet these criteria. All the middle office then has to do is input their own firms' data and characteristics, and then:

-
- ◆ define who the most similar competitors are;
 - ◆ ensure that like is being compared with like;
 - ◆ source net asset values (NAVs) from reliable sources; and
 - ◆ ensure pricing days, currencies and methodologies are the same.
-

The most important thing that the middle office has to avoid is classification bias. The lack of similarity among funds that meet classification rules tends to exasperate this problem, which gives managers ratings that are unjustified. The reality is that peer group universes revolve around managers as opposed to managers moving within their universes. Styles go in and out of favour but skill persists, although classification bias makes things appear otherwise.

There are currently two main peer group analysis firms: Lipper and Morningstar. Lipper's ranking system breaks funds into five tiers, based on performance. Unlike Lipper's performance-based ranking system, Morningstar's system is based on risk-adjusted performance. Its universe of open-end funds is divided into broad groups, and it awards fund star ratings. These are based on two parts: the return component and the risk component.

Gaming the universe of competitors is very common. Clearly this is not best practice! Funds often try to get themselves classified with a weaker set of competitors or into a different strategy in order to look good in the comparison tables.

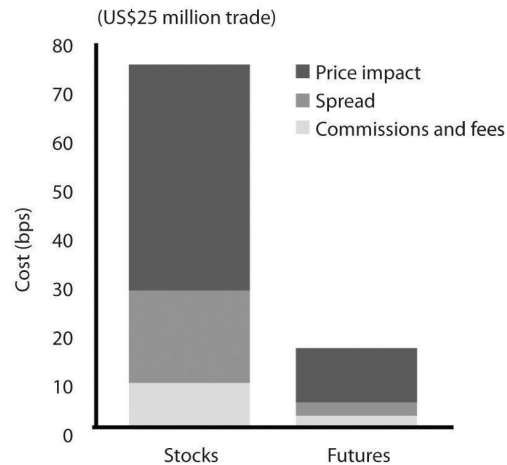
Monitoring Fund Leverage and Derivatives

Increasingly, middle offices are becoming responsible for monitoring leverage in funds. The number of funds with portfolios that incorporate leverage and derivatives is on the increase. According to Eurex, derivatives use has increased, with about 70% of fund managers incorporating them into portfolio management. The highest penetration is in France, Italy and the Netherlands, the lowest being in the UK and Nordic region.

The reason for this increase in derivatives is the lower cost of gaining market exposure. Figure 7.2 illustrates this dramatically.

Figure 7.2 Cost of acquiring beta exposure

Source: Goldman Sachs Asset Management



Risk control for derivatives is a far more complex process. Option values depend on the underlying variability of the asset to which they relate. Balance sheet management can be aided by market trends analysis, partly provided from external sources. This involves monitoring key parameters and data to anticipate demand trends.

The increase in leverage is a function of the demand for enhanced return. Measuring leverage sounds simple but is complicated where long–short strategies are pursued. In this respect:

- ◆ an unrealised loss on the long book increases leverage, while short exposure increases more quickly than long exposure decreases;
- ◆ an unrealised loss on the short book increases leverage, while short exposure increases more quickly than long exposure;
- ◆ an unrealised gain in the long book decreases leverage, while short exposure decreases more quickly with profit than long exposure increases; and
- ◆ an unrealised gain in the short book decreases leverage, while short exposure decreases more quickly with profit than long exposure.

It should be pointed out that leveraging a low-risk strategy is not the same as leveraging a high-risk strategy. The middle office should have separate disclosures for leverage and derivatives in their reporting schedule.

Conclusion

The middle office requires not only quantitative and qualitative skills, but also common sense. Resources such as tools and systems should be used internally to better understand the portfolios and avoid downside risk or style drift.

This chapter has positioned the middle office as the investment process policeman. This is because the middle office is an internal risk organisation, a sort of portfolio control group. There are a number of internal processes that this chapter has shown can be applied in order to ensure the systems and controls are both up to the job. These include analysis of data, the risk management function, an integration of qualitative judgment with quantitative analytics, an assessment of liquidity and counterparty risks and enhanced risk analytics, including stress testing, factor analysis, tail risk, and multiple-horizon models.

The risk function extends to more than just the portfolio, as was shown by the discussion on disaster recovery planning. Likewise, risk modelling is not always against benchmarks, but also sometimes against peer groups, or even simply to monitor leverage and position requirements. A good middle office is structured to address all these points.

The next chapter will look at the back-office structure and how it supports and delivers the operational support that both the front and middle office require.

8

Skill and Structure in the Back Office: Operations and Support

“Although the ultimate funds transfer may be handled via computer, the instruction is handled by a human being who is fallible. Thus the efficiency and reliability of the back office staff and their appreciation of the risks of the operations of the front office is paramount. Similarly, the attention given to training of this vital area and its ability to keep up with the developments of both instruments and systems will single out some institutions from others.”

Mervyn King, Governor, Bank of England

The back office provides all the support, administration and recordkeeping to ensure the efficient operations of a fund manager. As with any organisation, an efficient back office is essential to business success and, as Mervyn King points out, the weak link is the human interface.

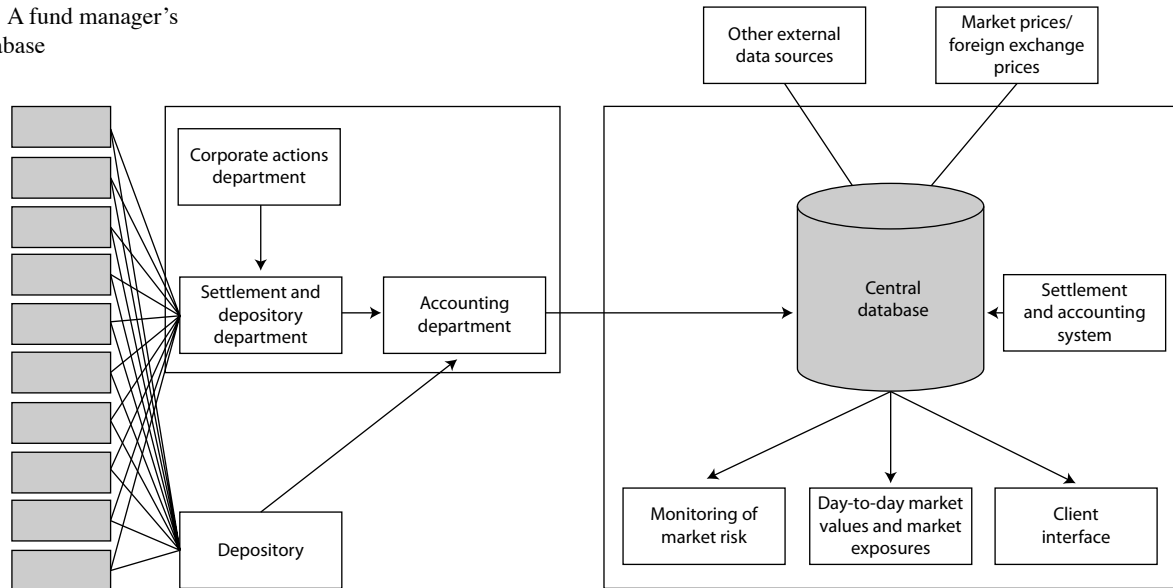
A central database should be at the core of the back office. Traditionally, this was based in-house, simply because the central mainframe had the processing power and memory needed for the large amount of information that has to be stored. Fund management is, after all, a data-centric business. Technology has now advanced to a stage where remote storage of such data with access by computer is also an option. A diagrammatic illustration of how the central database interacts with the firm is shown in Figure 8.1.

As with any database, the back-office functions should be seamlessly connected. Transaction processing and settlement are obviously at the core, but administration, control, post-trade processing and safe custody interface are equally important. In addition, there is accounting, fee billing and client reporting, all fairly standard back-office functions in any organisation. The key areas are generally:

-
- ◆ accounting;
 - ◆ business activity monitoring;
 - ◆ client reporting;
 - ◆ fee billing;

- ◆ funds transfer;
- ◆ reconciliation systems;
- ◆ pricing feeds;
- ◆ product processing;
- ◆ reconciliation/matching systems;
- ◆ safe custody interface;
- ◆ settlement and documentation; and
- ◆ transaction processing.

Figure 8.1 A fund manager’s central database



The most specific of these key areas to fund management are transaction processing, settlement, custody and documentation, all of which are central to running a fund. The back office handles these by checking that records, matching instructions and ensuring processed orders are all correct. Despite all the technology, it is still a labour-intensive process.

The main reason why it is so labour intensive is that settlements cover everything from preparing the documentation required for a sale, to making sure a fund has been paid, or paid for all the instruments it has sold and bought. This requires the back office to have operational and technical support systems for a vast array of unique transactions.

Accounting and administration is also a major function of the back office. In particular, investment accounting, which includes the provisions of valuations and client reports, is an important support function to a fund manager’s business. Obviously, standard operations, such as tax reclaims, management information and payments, are all required. Mutual fund administration, such as client dealing, associated administration, contract notes, distribution and reporting are likewise required and performed by the back office.

In the author’s opinion, general administration, such as regulatory reporting and in-house monitoring, as well as corporate management such as training, personnel, staff and premises management, also all fall under the purview of the back office. All these functions require that a fund manager has a robust technology backbone.

Technology

Information technology (IT) is ubiquitous in the back office of fund management firms. The IT department is responsible for all systems and data used by fund managers. Such data includes real-time prices and news, supplied by such vendors as Bloomberg and Reuters, as well as historic data. Equally important is a full historic audit trail of fund's transactions and holdings.

The author would argue that technology can also bring competitive advantage. One of the most secretive hedge funds is the D. E. Shaw Group, which had around US\$28 billion in AUM as at the beginning of 2010. It sees advanced technology as one of its key strengths, and describes itself as a "global investment and technology development firm", rather than a fund manager. Clearly other fund managers should take notice.

The technology systems that D. E. Shaw, or indeed any IT department, oversees include back-office investment accounting (which is the prime record for the assets manager's holdings), order management, dealing systems and fund analysis decision-support systems. All these have to be supported by:

-
- ◆ a core server;
 - ◆ a network;
 - ◆ a database;
 - ◆ a service centre/help desk;
 - ◆ front-office fund management; and
 - ◆ Internet/intranet functionality
-

One of the problems with all these disparate systems is that they present challenges in aggregating data across the various departments in a meaningful and timely fashion. Consolidated P&L and portfolio reports need to be produced on an end-of-day basis, or by early morning the following day at the latest.

Processing all this data is complicated by the fact that many fund managers have legacy systems. These are often the result of age, different mergers or poor planning. A possible remedial approach in a legacy environment can be to introduce a services layer in the IT architecture that paves the way for the introduction of intelligence in the deeper layers without disrupting front-end processes.

The Internet has become an important IT add-on, and is perhaps the hardest to interface with legacy systems. Many firms now use Hypertext Transfer Protocol Secure (HTTPS) protocol to access the Internet and overcome this issue. This facilitates a secure Website where a Web page displays a firm's directory. It is then possible to upload data files to this directory from the firm's local network. File Transfer Protocol (FTP) client capabilities and Pretty Good Privacy (PGP) or GNU Privacy Guard (GNUPG) software allows for file encryption and decryption. Day-to-day fund data is, after all, sensitive information.

Handling Day-To-Day Fund Accounting

Processing and day-to-day fund accounting is the main function of the back office. The back office oversees all aspects of such accounting practices. This includes the management of a variety of ledgers and fund asset values.

To achieve this, it is necessary to reconcile all data at day-end and ensure all holdings are accurate. The fund accounting should therefore cover the following areas:

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- ◆ accounting books;
 - ◆ portfolio valuation;
 - ◆ securities transactions; and
 - ◆ corporate actions.
-

The sub-accounts to which the information relates typically includes the fund manager's account numbers, internal codes, text descriptions or codes.

Keeping all these sub-accounts up to date is no mean task. All transactions have to be entered into a fund manager's internal system. Intra-day or overnight processing then generates a trade confirmation for each entry. The system then helps determine whether a paper confirmation or an electronic confirmation should be produced and managed by the back-office system. This will depend on the type of security involved and the place of settlement. Separately, the system will then need to notify each custodian that a trade has been executed for a particular account. This will alert the custodian to the trade and allow the custodian to prepare for settlement. The resulting process ensures that funds or securities are available in that account to complete the transaction with the counterparty on settlement date.

Taking a closer look at the core IT systems that support this process and underpin the firm, it is typical to find systems environment characterised by:

-
- ◆ a mixture of new systems and older "legacy" systems;
 - ◆ a wide range of technologies;
 - ◆ existing systems which are already proven in the business environment;
 - ◆ many systems which are "off-the-shelf" products from various vendors;
 - ◆ some systems with "open" interfaces, others with only closed, proprietary interfaces;
 - ◆ systems developed in-house; and
 - ◆ systems which have evolved over time.
-

The chief technology officer (CTO) should ensure all the disparate systems communicate efficiently. It is near impossible to design a system to cover all products across the different markets. The overall aim should be towards interfacing systems and ensuring that front- and back-office systems speak the same language and are robust enough to do the job.

Having Robust Systems and Database

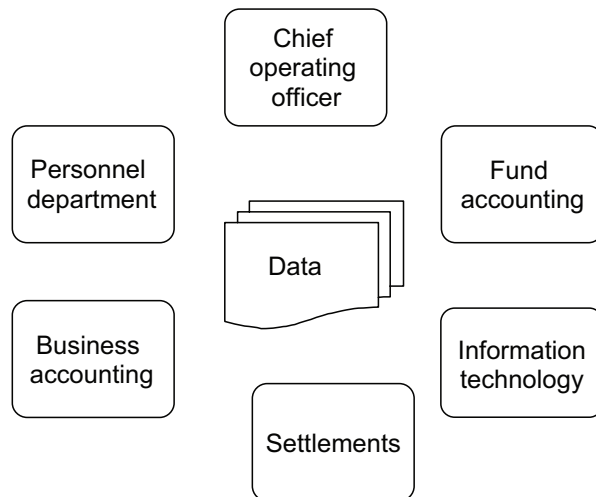
Fund management firms and their back offices are evolving towards a more integrated approach throughout their business, and that requires a robust system and database. They are increasingly introducing common products, systems and standards across all areas, rather than operating as independent departments.

In the past, back-office applications have tended to lag integration initia-

tives at fund management firms. Finance departments, for example, have been particularly slow to open up their data and applications to integration with other parts of the firm. There is now a consensus that integration pays.

Having the right and adequate systems is critical to the efficient operational running of a fund manager. Systems capabilities should extend to all computers, communications, dealing and settlement systems. These should ensure that the back office has all that is necessary for the professional execution of their business. In this respect, it is important to deliver what is termed a data-centric back office (see Figure 8.2).

Figure 8.2 Data-centric back office



The author believes that this data-centric model is the key to operational efficiency, primarily because it has streamlined data management at its core. Addressing this helps fund management companies maintain consistent and accurate data. It should be pointed out that there are a number of approaches to improving data quality; however, having centralised data and establishing one common database has proven to be the most effective model.

A central repository of data such as this can support an enterprise-wide risk framework assessment, the portfolio interface, any analysis and reporting. It provides the ability to pull and push data from/to other systems within the organisation to leverage the data that exists elsewhere.

Technology should be seen as an enabler, supporting the portfolio management process, not defining it. The main issues associated with implementing a data-centric back office are:

- ◆ consolidating information to be held in the database;
- ◆ getting information into the database in the first place, from wherever and however it is held across the firm;
- ◆ keeping it up to date; and
- ◆ removing unnecessary data and normalising data formats.

It is critical that systems development does not lag product development. Likewise, it is critical the system can handle complex financial instruments. Problems can occur in situations where systems are not capable of processing unusual, more structured, transactions conducted by front-office staff.

Handling derivative instruments, for example, can present challenges.

Handling Derivative Instruments

Fund management back offices are increasingly facing the challenge of adapting to financial complexity. FAS 157, which came into effect on November 15, 2007, resulted in back offices automating their derivatives processing in order to deliver compliant valuations. This represented somewhat of a watershed.

Handling derivative currently requires a lot of manual input. For instance, counterparties must confirm the details of deals with each other. The confirmation lists the economic features of the transaction as well as many legal terms. Most of the time, both over-the-counter (OTC) and exchange-traded derivatives are settled by the same back-office department.

Fortunately, the world is increasingly moving toward standardised liquid contracts that are traded in organised exchanges where there is enhanced transparency and lower systemic risk. Credit default, interest rate and equity swaps transactions, however, are not handled by electronic confirmation platforms. In addition, almost all non-vanilla trades also use paper-based confirmations.

Standardisation has been facilitated by the International Swaps and Derivatives Association (ISDA), which represents participants in the privately negotiated derivatives industry. ISDA is one of the largest global financial trade associations, and has developed templates for confirmations that fund managers can use for many products.

Electronically generated confirmations are still often manually verified by counterparties. Many confirmations, for example, are still faxed, which is an archaic practice. The Society for Worldwide Interbank Financial Telecommunication (SWIFT), which is explained in more detail later in this chapter, is an interbank messaging system that is slightly more modern. It is used to confirm foreign currency options, forward rate agreements and cross-currency swaps, but its usefulness is limited because both counterparties must employ the system to ensure efficient pre- and post-trade processing.

Ensuring Efficient Pre- and Post-Trade Processing

To be effective, back offices must understand pre-trading and post-trade processes to find and eliminate systemic inefficiencies. It is advisable, for example, to use data analysis techniques to analyse back-office systems and find ways to obtain greater accuracy. One way to do this is to link the pre-trade process to the post-trade process. In other words, to link the order input system with the settlement system.

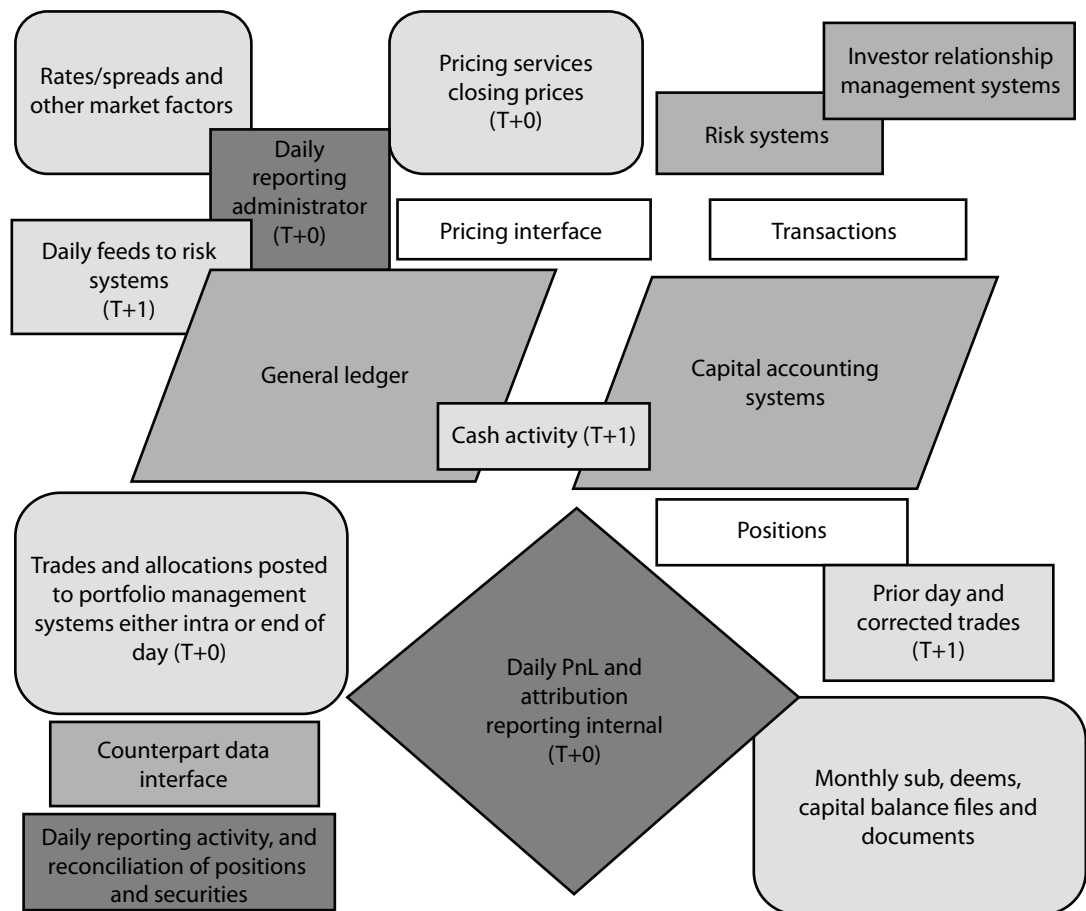
In order to link pre- and post-trade processing, the settlement and reconciliation process should be able to interface with:

- ◆ order input;
- ◆ broker-dealers;
- ◆ custodians;
- ◆ account keepers;
- ◆ global clearers;
- ◆ fund administration;

- ◆ client systems;
- ◆ settlement/delivery;
- ◆ reconciliation; and
- ◆ online compliance.

The various components above are normally connected in a flow chart. There is, however, no optimal way to link the various ledgers, processing, interfaces and reporting systems. The components of such a flow chart are shown in Figure 8.3, but in this instance are not linked, as links differ from firm to firm.

Figure 8.3 A selection of various back-office architecture



In understanding back-office architecture, it is essential to monitor all variables in order to ensure adequate record keeping. These include, for example, the trading day on which the transaction was executed and the time at which the transaction was executed and reported. It is also necessary to identify whether any transaction was a buy or sell, and for all the right identifiers to be in place.

In respect of the above, instrument identification consists of a unique code that helps the system identify financial instruments. They should include:

- ◆ an indication as to whether the quantity is the number of units of financial instruments, the nominal value of bonds or the number of derivative contracts;
- ◆ identification of the counterparty to the transaction – that identification shall consist of a unique code for that firm; and
- ◆ identification of the venue where the transaction was executed.

A number of trade-processing vendors have standard add-on systems that ensure the above criteria are applied. Panel 8.1 lists a few of them.

Panel 8.1 Trade-Processing Vendors

<p>Equities:</p> <hr/> <ul style="list-style-type: none"> ◆ AQUA ◆ BIDS Trading ◆ ITG POSIT ◆ ICAP BlockCross ◆ LiquidNet ◆ NYFIX EuroMillennium ◆ Pipeline ◆ Pulse BlockCross <hr/> <p>Fixed income:</p> <hr/> <ul style="list-style-type: none"> ◆ Bloomberg TSOX ◆ BondVision ◆ MarketAxess ◆ Tradeweb <hr/> <p>Foreign exchange:</p> <hr/> <ul style="list-style-type: none"> ◆ BaxterFX ◆ Currenex ◆ FXall ◆ FXConnect ◆ FXCM <hr/>

Settlement

All back offices should be structured for efficient settlement. Settlement is the process through which any transaction is completed. In effect, it is the final transfer of securities from the seller to the buyer and final transfer of funds from the buyer to the seller.

Fund managers go to great lengths to settle trades and reduce the risk of non-payment. Unexpected operational issues can cause payments not to be made on time and on contract. By far the largest financial risks in securities clearance and settlement occur during the settlement process. The various components of this process are:

Daily transactions

-
- ◆ cash account positions;
 - ◆ detailed cash account positions; and
 - ◆ customer cash balances.
-

Summary portfolio position

-
- ◆ order table;
 - ◆ trade table;
 - ◆ client security transaction; and
 - ◆ client cash transaction.
-

Trading reports

-
- ◆ trades by broker report;
 - ◆ commission/fees by broker report; and
 - ◆ client's order book.
-

Transaction/position reports

-
- ◆ daily/monthly transaction list with several sort and order criteria – client, security, currency, treasury bank, broker, market counterpart, etc;
 - ◆ detailed client report: all settled transactions (statement of accounts);
 - ◆ monthly customer statement: position and transaction list;
 - ◆ currency/daily summary report;
 - ◆ counterparty/daily summary report; and
 - ◆ enable transactions cancellation (if any).
-

The mechanisms for clearing and settling securities transactions vary by market and type of instrument. They generally involve clearing and securities depositories. In this respect, some of the fund manager's operational risk is transferred to the clearing system.

Clearing systems provide trade confirmation and comparison services, and the multilateral netting of trade obligations. Securities depositories, on the other hand, transfer securities ownership on a gross or net basis against payment via book-entry transfers. There are three models used for this:

-
- ◆ Model 1: systems that settle transfer instructions for both securities and funds on a trade-by-trade (gross) basis, with final (unconditional) transfer of securities from the seller to the buyer (delivery) occurring at the same time as final transfer of funds from the buyer to the seller (payment).
 - ◆ Model 2: systems that settle securities transfer instructions on a gross basis with final transfer of securities from the seller to the buyer (delivery) occurring throughout the processing cycle, but settles fund transfer instructions on a net basis, with final transfer of funds from the buyer to the seller (payment) occurring at the end of the processing cycle.

- ◆ Model 3: systems that settle transfer instructions for both securities and funds on a net basis, with final transfers of both securities and funds occurring at the end of the processing cycle.

In addition to one of these three modules, a fund manager's back office should also have an appropriate counterparty administration, measurement and monitoring process. The settlements system should be integrated with these as well as real-time data management and decision support. An integrated system solution to automate and streamline processes is critical to long-term success and is often called straight-through processing (STP).

Implementing Straight-Through Processing

The industry has evolved from point-to-point connections for internal applications and external communication. The resulting STP is a means to increase profitability. The move to STP offers an opportunity to create an infrastructure that supports the fund manager and provides a competitive advantage for firms.

With the whole investment cycle becoming much faster, STP automates the end-to-end processing of transactions of financial instruments. The main advantage of straight-through processes is that they reduce or remove the need to re-key information from one system to the next, reducing administrative costs and the potential for error. This applies to the following areas:

- ◆ sales and purchases of securities;
- ◆ transfer of securities to and from another trustee/custodian;
- ◆ stock lending/borrowing;
- ◆ margin loan re-financing; and,
- ◆ capital raisings (placements, offers, book builds and underwriting).

Essentially, all fund managers should now use a single system to process or control all elements of their workflow in respect of financial transactions, including the front, middle and back office. Key to implementing STP in this respect are the SWIFT and Financial Information eXchange (FIX) protocols.

Society for Worldwide Interbank Financial Telecommunication (SWIFT)

Internal STP relies on electronic external communication messaging protocols like that adopted by SWIFT. The use of the SWIFT format, across fund managers and their clients, reduces implementation costs for establishing and switching, and ensures improved processing. Fund managers can therefore initiate complex, multi-stage transactions that, using workflow management and application integration, then automatically trigger the appropriate downstream business processes. These can then pass seamlessly from one application to the next without the need for extensive manual intervention.

SWIFT is an industry-owned secure and standardised messaging service. It has connectivity to the majority of fund managers. The advantage of SWIFT is that it is not only investment management companies that use it, but also broker-dealers, custodians, securities depositories, clearing organisations, exchanges, central counterparties, virtual matching utilities, elec-

tronic trade providers, proxy voting service providers, market data providers, distributors, transfer agents and fund administrators.

Messages are typically sent between a fund manager and a financial institution such as a custodian to provide settlement instructions and confirmations of settlement. Standardisation gives the means to safeguard operational efficiency in an ever-changing environment. A more recent protocol is FIX, which is fast gaining ground on SWIFT.

The Financial Information eXchange (FIX)

FIX is a back office protocol messaging system for the electronic communication of trade-related messages. It has been developed through the collaboration of fund managers, banks, broker-dealers and exchanges. It is one thing to be able to trade efficiently, but it is another to be able to communicate your intentions and instructions to third parties associated with the trades. Market participants want a common, global language for the automated trading of financial instruments.

FIX is a messaging standard that is changing the face of settlements. The protocol is used to transact trades in an electronic, transparent, cost efficient and timely manner. FIX has rapidly emerged as the most popular electronic trading standard, although many exchanges still have their own protocol, such as the AMS3 protocol used by the Hong Kong Stock Exchange.

FIX is open and free, but it is not software. Rather, FIX is a specification around which software developers can create commercial or open-source software, as they see fit. It is now integral to many order management and trading systems. The FIX protocol is very flexible. In order to accommodate custom requirements, FIX has been designed to be fully customisable, as the precise order and definition of many of the FIX fields is open.

A FIX engine is the software which implements the FIX protocol and which is used by brokers and clients firms for electronic trading. There are many commercial FIX engines available, such as Appia from NYFIX or the CameronFix Engine. The author would advocate a fund manager adopt FIX in preference to SWIFT.

Integrating the Accounts Function

The act of integrating the accounts function at fund management firms is often overlooked because accounting software is typically sold as a stand-alone system. The various different functions and reports that have to be integrated are as follows:

Functions

- ◆ overall finance function;
 - ◆ payroll and travel and entertainment;
 - ◆ accounts payable and billing;
 - ◆ accounts receivable and financial reporting;
 - ◆ budgeting/analysis and fixed-asset accounting; and
 - ◆ internal audit and tax.
-

Financial reports

- ◆ payments status;
- ◆ financial statement;
- ◆ accumulated journal entries;
- ◆ settled and unsettled transactions;
- ◆ cancelled invoices;
- ◆ credited and debited clients;
- ◆ client account statements;
- ◆ journal entries trial balance;
- ◆ fund performance; and
- ◆ customer invoices.

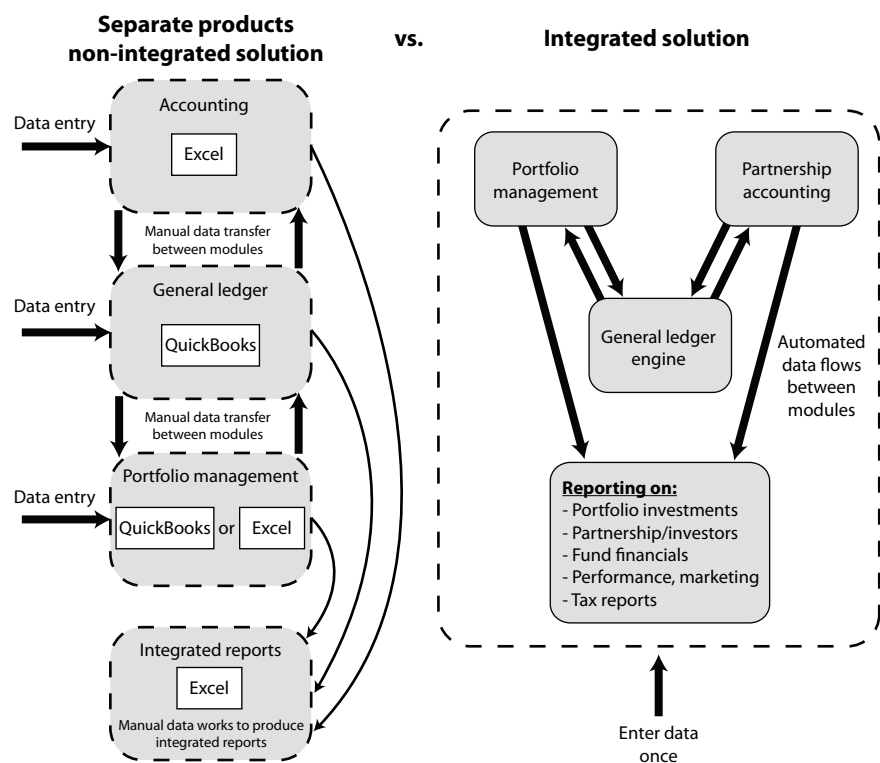
Client reports

- ◆ client account statements;
- ◆ client invoices sheets;
- ◆ client portfolio analysis; and
- ◆ interface with risk and portfolio commentary.

The difference between an integrated solution and a non-integrated solution is shown in Figure 8.4. Essentially, it is the focus of where the general ledger lies in the data flows between these various functions and reports that makes the difference in the firm architecture.

Figure 8.4 Integrated versus non-integrated ledgers

Source: FundCount



The author would add that, in addition to the portfolio management and accounting report, the fund management account functions should be adapted for fees and the unique charges inherent in the business. The system should be able to define any number of rules for an account, and therefore, any number of fee types for an account. The system should be set up to specify its own calculation and billing frequency, asset basis, minimums/maximums, discounts and so on.

The accounting department should be able to bill clients effectively. The fee run should be able to be charged to the clients in multiple ways, such as directly from the fund or by hard-copy invoice. Each and every fee should be able to be presented in a separate invoice and multiple fees should be combined into one invoice. The system should also support account aggregation that allows for multiple accounts. Billing rules should be defined at the relationship level. It is then possible to aggregate assets across funds for the purposes of determining appropriate billing rates. This allows customers – whether institutional or private – to pool their assets.

Once again, the importance of integration is clear. The billing software should be linked to the portfolio system, which permits upload of portfolio balances. Hence, options such as excluding cash from the billable assets or applying certain functions only to the equities or fixed income portion of the client assets are possible. Portfolios can then be marked to reflect the impact of these cashflows on the invoice in multiple ways.

In devising a back office system, it is a good idea to allow data entry of account balances as reported by the custodian and/or to build reconciliation into the internal systems. Finally, the system should have both audit and security functionality. Some, or all, of this functionality can be outsourced.

Outsourcing

Almost all aspects of a back office can be outsourced. When considering outsourcing arrangements, and in line with good industry practice, fund managers should undertake appropriate due diligence. Where possible, it is always a good idea to check industry references.

Outsourcing arrangements should be documented by means of appropriate contracts, service level agreements (including appropriate performance measures), escalation procedures and continuity arrangements. The *modus operandi* should also be written into the operations manual.

There are a number of risks that need to be considered when outsourcing. These include:

-
- ◆ counterparty risk –there may be different legal entities facing counterparties;
 - ◆ legal and compliance risk – it is important to understand the implications of compliance to regulatory standards; and
 - ◆ operational risk – it is useful to develop a strong reporting framework and infrastructure to ensure data consistency and integration across systems.
-

Outsourcing provides a clearer framework for managing potential conflicts of interest; and it also allows sufficiently experienced and senior staff to always be on call, whatever the size of a firm.

Fund Administrators

One of the most frequently outsourced back-office functions is fund administration. Fund administrators look after the operational activities for collective funds. They also provide investors with a degree of confidence. The role of an administrator is to provide net asset values (NAVs), as well as financial and tax reporting. Administrators also assist with the know-your-client (KYC) procedures and provide useful third-party record reconciliations.

Outsourcing to a fund administrator allows fund managers to pay more attention to managing the investment portfolio and servicing clients. In addition to the third-party verification of a fund's operations, they provide:

-
- ◆ administrative work;
 - ◆ counterparty monitoring;
 - ◆ support to trading applications and order management across multiple prime brokers;
 - ◆ aggregated portfolio reporting;
 - ◆ risk management for the back office; and
 - ◆ NAV calculation.
-

Administrators, like custodians, often have more sophisticated pricing ability than the fund manager due to the collective size of their operations.

Custody

Another frequently outsourced function is the safe keeping of the assets that a fund manager is responsible for to a custodian. Such a custodian holds the assets for a customer and deals with all administrative matters relating to those assets. These matters include the collection of dividends or interest, notification of voting or conversion rights and dealing with withholding tax reclamations. In return for the provision of its services, the custodian charges the fund a fee.

The custodian is liable for the loss to the portfolio unless it can show abnormal and unforeseeable circumstances beyond its control. This effectively constitutes a force majeure standard.

There are two distinct types of custodians, the truly global custodians and the regional providers. The global custodians offer a commoditised service to the institutional investors. The smaller custodians provide services to those requiring specialist niche products or regional sub-custody. The biggest global custodians are US-based companies State Street Citibank, Chase Manhattan and Bank of New York. Smaller custodians, on the other hand, are often regional banks.

The best custodians have a fully transparent charging structure for custody, FX, cash, securities lending and risk intermediation. Additional services include asset servicing, reporting and financing products, the last also being the function of a prime broker.

Prime Brokerage

Prime brokerage is a relatively new outsourced service. Prime brokers provide credit as pricing and servicing models to financially complex trading strategies. In effect, the ability to provide credit intermediation enables funds to trade using the brokers' credit rating, providing better

market access and pricing for credit-dependent markets. In addition to providing financing, prime brokers also offer a range of other services, such as technology and research, and stock loan facilities.

Short selling has resulted in an increase in demand for such services. Prime brokers locate collateral for covering short positions. A significant portion of collateral is typically borrowed from bank-owned custodians. In taking long-position collateral and lending it out to funds, borrowing fees can be used by fund managers to offset operational costs or add to the performance of funds.

The bankruptcy of prime brokerage departments at Lehman Brothers and Bear Stearns in 2008 resulted in some hedge funds losing collateralised assets. This brought to the fore the counterparty risk faced by hedge funds from their prime brokerage relationships. A number of London-based managers, Bluebay, GLG, Marshall Wace, Polygon, RAB and TCI, lost 50% of their assets in the first half of 2009 as a result of this issue.

Prime brokers now use credit limits on counterparty exposures as an important credit risk management tool that serves to control credit risk exposures through diversification. In practice, the degree of collateralisation tends to vary with the creditworthiness of the borrower.

While collateral can mitigate credit risk in trading relationships, it does not eliminate it. The fund management industry is now having to adapt to accommodate short selling and securities lending.

Adapting to Accommodate Short Selling and Securities Lending

One of the most striking differences between the fund management industry in the past and now is the degree of short selling. Short selling is the sale of capital market instruments that the seller does not own, which are completed by using borrowed capital market instruments to fulfil the settlement obligation relating to the sale.

Borrowing stock costs money and securities lending is a source of income for both equity and fixed income fund management. It enables funds to lend proprietary and client securities in return for a fee, generating additional returns on existing securities positions without placing any restrictions on investment flexibility. As a rule, the securities are lent, although they are subject to recall. Lending activities are in effect based on the holdings in custodians or prime brokers.

The biggest challenge fund managers have in adapting to the world of short selling is addressing outdated legal work. This is because, from a legal perspective, securities lending is classified as a loan. The owner of a position temporarily lends securities to another party against a commission. Such a loan results in a transfer of title/ownership to the borrower, who is obliged to return the same type and amount of securities at the end of a specified period. Many funds do not have the legal permission to tend in this way, and this has to be changed before a fund manager can enter into this kind of transaction.

The back office has to adapt to facilitate stock lending. This includes ensuring its personnel have the requisite skills.

Back-Office Personnel Issues

Back-office personnel require specialist knowledge of all the complex instruments that a firm deals in. The skills required for the back office are a broad range of competencies, including analytical and problem-solving skills.

In the author's opinion, having truly independent back-office staff that can understand and analyse the risks associated with more complex transactions, such as derivatives, is just as important as having a competent front office that invests in these instruments. The quality of back-office staff has steadily improved in terms of educational requirements, experience and remuneration. However, it still remains the fact that the back office lags behind the front office.

Not having the right back-office staff can give rise to operational risk, ie, the possibility of losses from systems, processes, technology or individuals. In many firms, accounting, reporting, reconciliation and trading operate in silos. This should be avoided and work should be done at the firm level to ensure inter-personal skills do not get in the way of an efficient back office.

Interpersonal Skills

As with all areas of the back office, interpersonal skills and the ability to work in a team is important. The back office involves dealing with many different people, organisations and procedures. Above all, back-office staff need strong attention to detail. Employees should be able to:

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- ◆ advise colleagues promptly of any difficulties, or where it will be impossible to carry out any commitments made;
 - ◆ check, on a regular basis, how time is being allocated and identify possible improvements;
 - ◆ co-operate with, and offer assistance to, colleagues to help achieve work objectives;
 - ◆ fulfil commitments made to other colleagues;
 - ◆ identify and prioritise to ensure that work objectives are fulfilled;
 - ◆ make sure all the necessary resources to complete work and produce the required outputs are in place;
 - ◆ report and discuss difficulties promptly to the appropriate people;
 - ◆ seek assistance when necessary to meet work demands and complete work to the required standards;
 - ◆ show understanding of others and deal with them in a professional manner; and
 - ◆ use communication styles that are appropriate to different people and situations.
-

It is also important to have sufficient staff numbers and ensure that all relevant persons are adequately qualified for their tasks. In the same vein, fund managers should provide adequate training for their staff.

Conclusion

This chapter has shown that fund managers can differentiate themselves by an efficient back office. Processing higher data volumes more quickly than competitors and analysing greater data complexity can provide a competitive edge. Obviously, technology can assist in this, so this chapter has rec-

ommended data be at the core of the back office.

The integrity and timeliness of pre- and post-trade processing is a key component of the back office. One of the biggest challenges is to ensure accurate, timely data across the entire operation, from settlements to fund accounting. The problem of the large number of disparate systems used has to be overcome. The chapter therefore also recommended that fund managers spend time on their technology architecture. After all, funds need to be valued and firms must either have, or have use of, valuation systems that encompass the full array of securities in which they might invest on behalf of clients.

In order to ensure that all back-office departments run smoothly, written policies, procedures and manuals should be available for all the back-office functions, including accounting, human resources, information technology, settlement and processing. The final part of the chapter addressed the need for the right skills. In this respect, the next chapter will detail the key job functions in the back office, as well as the front and middle office.

Panel 8.2 Establishing a Records Retention Policy

Back office records

Fund managers must develop a robust records retention process. This should also have a good back-up through the orderly transfer of data to a proper storage database. They should provide for records and archives storage, including supervision with the client documentation, compliance and trading records. The various ledgers that should be kept are detailed below.

- ◆ Legal opinions confirming enforceability ledger – a record of the legal review showing enforceability of credit protection arrangements in all relevant jurisdictions.
- ◆ Collateral procedures ledger – documented policies covering the types and amounts of collateral accepted.
- ◆ Material risks ledger – documented risks and those not captured in the firm’s risk model, including a prudent overview for the risks not captured.
- ◆ Legal opinions ledger – a record of the legal opinions.
- ◆ Exposure to counterparties ledger – a record of the steps taken by the firm to satisfy itself that its counterparty exposures are acceptable.
- ◆ Capital plan ledger – a capital plan that addresses the corporate strategy (business plan).
- ◆ Conflict of interest ledger – a list of the kinds of service or activity carried out by or on behalf of the firm in which a conflict of interest entails a material risk. This can include damage to the interests of one or more clients or, in the case of an ongoing service, any conflicts that may arise.
- ◆ Prudential risk management, systems and controls ledgers – this includes accounting and other records that are sufficient to enable

the firm to demonstrate to the regulators: (1) that the firm is financially sound and has appropriate systems and controls; (2) the firm's financial position and exposure to risk (to a reasonable degree of accuracy); and (3) the firm's compliance with the rules.

- ◆ Compliance with sourcebook ledger – records data on competence, which is relevant for compliance with the sourcebook.
 - ◆ Firm's assessment of its financial resources ledger – which includes: (1) the major sources of risk the firm has identified; (2) how the firm intends to deal with those risks; and (3) details of the stress and scenario analyses carried out and the resulting financial resources estimated to be required.
 - ◆ Valuation models ledger – secure copy of firm's own valuation models.
-

The back office should maintain these ledgers to assure efficient usage and prompt retrieval of records. It should also have and maintain a records protection programme.

9

Job Functions

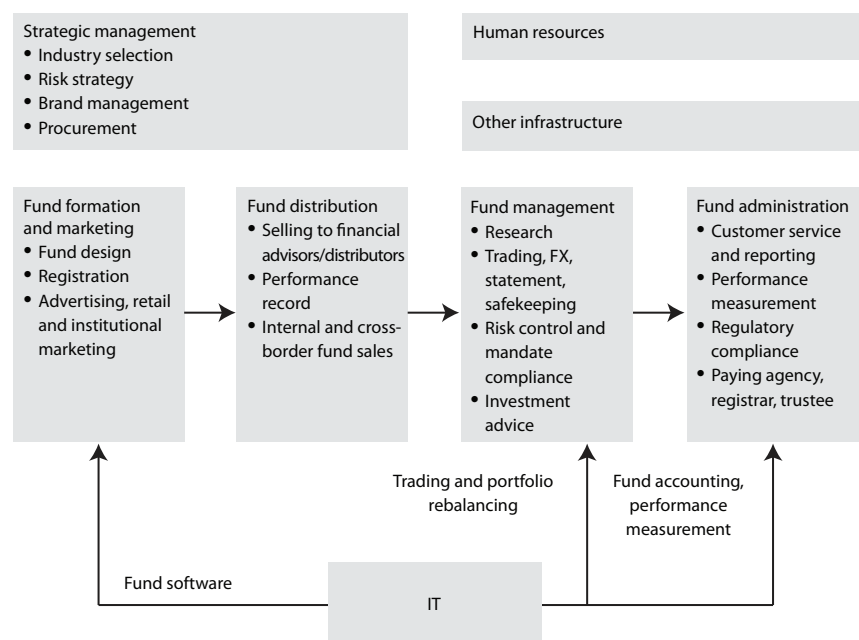
“Management is nothing more than motivating other people.” *Lee Iacocca*

Fund management is a people business. There is an old adage that says that the assets go down with the lift every day as the employees leave. As a result, job functions are important to define and responsibilities should be clearly laid out.

In order to better understand how job functions interact within the firm, it is normal to construct a corporate matrix that shows the lines of authority and communication. In this respect, there is no typical schematic for a fund management matrix. The main pillars of the business are all interrelated and, as such, firms can either have flat or hierarchical matrix. A few of the key areas are shown in Figure 9.1.

Figure 9.1 Key roles at fund management firms

Source: International Tax Review



As has been shown, regardless of the organisation structure, the key element in any fund management company is its people. They should not only have the right skillset, but should also have the ability to deliver on the firm's investment and other goals. To achieve this, senior management at the firm should have a clear understanding of:

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- ◆ what it takes to make people succeed in fund management; and
 - ◆ what it takes to motivate fund managers and support staff.
-

Compensation is clearly a key metric in these issues, and this is addressed later in the chapter. Delivering investment performance is another of the key metrics, and this is addressed throughout the book. Also, as a people business, job function cannot really be divorced from the business model, operations and procedures of a fund management company.

The concentration on human capital means that fund management companies have to be employee focused. In this respect, it is important to understand that such a focus is only as strong as the weakest link. If human error results in wrong data inputs, at any stage in the process, the resultant output is compromised. To avoid this, and in order to get the most out of employees, senior management need to:

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- ◆ communicate a vision of what the business stands for, and the mission to achieve this;
 - ◆ communicate values and priorities across the organisation;
 - ◆ ensure the investment performance is based on a strong theoretic background;
 - ◆ establish a friendly, collaborative professional environment;
 - ◆ ensure flexible knowledge based working practices supported by appropriate technology; and
 - ◆ delegate and allow investment professionals to take responsibility.
-

The first step in achieving the above is to have a clear idea of what the various job functions are.

How to Write Internal and External Job Descriptions

A job description is not only a regulatory requirement but is central to the overall business planning effort. It makes sense to embed the preparation of all employees' roles within the human resources (HR) department. This makes for a more formal delineation of authority.

There should be both internal job descriptions for company use and external job descriptions for prospective employees. The former should be very thorough and complete, while the latter should be an abridged version of the internal job description, typically more of a marketing pitch.

The internal job description should be embedded in the compliance and business continuity framework. This provides a paper trail and allocated responsibility for actions taken by individuals within the firm.

Once written, job descriptions can be a useful management tool. They

can be used to ensure that employees prioritise their time correctly. This is because, together with the employment contract, they are the official description of what the employee is actually paid to do. Although a job description rarely specifies that an employee should attend a much-prized, expensive and time-consuming conference in the Caribbean, it does specify day-to-day and mission-critical tasks.

A well-written and comprehensive job description should typically be about four or five pages in length. It should include a thorough, detailed description of the tasks expected of the employee, and should contain the following components:

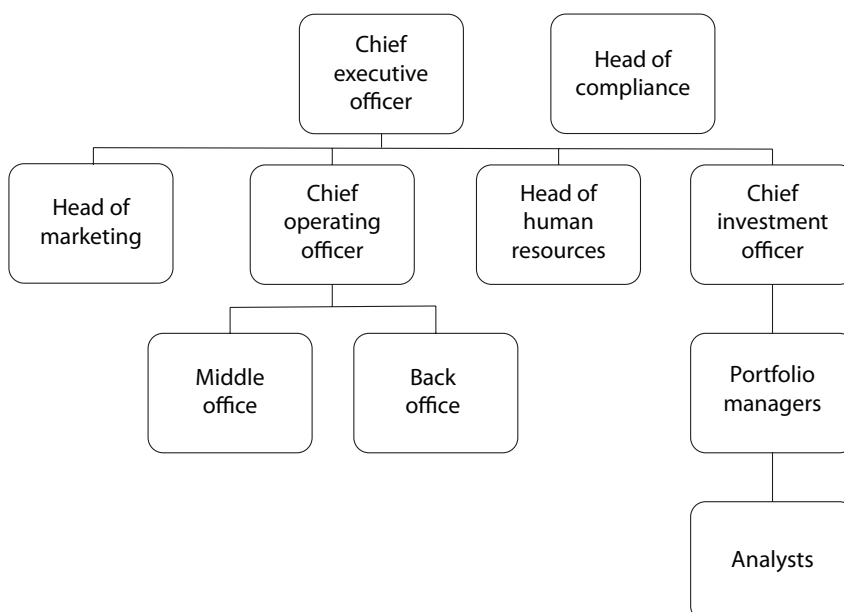
- ◆ administrative information;
- ◆ reporting structure;
- ◆ metrics;
- ◆ job functions and contributions;
- ◆ required competencies; and
- ◆ interaction/impact matrix.

It is best to make all these components flexible. The administrative information, for example, should be included in a dynamic format. In other words, names and tasks should be able to be updated in the internal description. Similarly, the reporting structure is best presented in a living organisation chart that shows exactly where the position fits within the organisational hierarchy. Any dotted line relationships or dual reports in such a chart should be clearly delineated.

The position of a role in an organisational hierarchy empowers the employee, allowing them to better follow progress and influence decisions.

Unfortunately, fund management organisations often fail to focus on the detail of such a hierarchy. Rarely, for example, does the detail go down to the fund level. It is good practice to do this and have reporting lines and responsibilities delineated for each and every fund.

Figure 9.2 Typical firm hierarchy



However, there is no such thing as typical fund management reporting structure. Some commonalities tend to exist, such as can be seen in Figure 9.2. These commonalities include the independence of the compliance function, the investment team reporting to the chief investment officer (CIO) and the middle and back office reporting to the chief operating officer (COO).

The required competences and administration information for these functions are detailed later in this chapter. In fund management, such competences have to be paid for, and how this is done will be addressed next.

Criteria for “Good” and “Bad” Remuneration Policies

There are both good and bad remuneration policies. The good ones ensure that a firm's investment processes and employee skills result in outperformance of investment benchmark and peers. The bad ones fail to achieve that and are counterproductive. It should not be forgotten that compensation is the main tool for recruiting, managing and motivating staff. It is crucial to get this element right, by focusing on alignment of interests.

The best way to ensure long-term organisational cohesion is for the employee's role to be consistent with the mission, vision, policy aims and principles of the firm. Salary and bonus are key tools in making this happen; this is where good remuneration policies come into their own. Fortunately, there are compensation consultants that can help.

There has been a lot written on good and bad remuneration policies. In summary, these say that to be effective an incentive scheme needs to:

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- ◆ be appropriate and measurable against performance targets;
 - ◆ ensure effective communications;
 - ◆ encompass all key elements of individual performance; and
 - ◆ operate in an environment where employees know what values, performances, skills and behaviours will be rewarded and recognised.
-

There is no one-size-fits-all solution. Indeed, there are tensions and risks in any reward scheme, and these need to be recognised and managed. One such tension is where a manager has multiple funds. Where should his focus be? The answer is that the manager should concentrate on them all equally, regardless of size. Another common tension in fund management is between the needs of the organisation to reward teamwork and the need to recognise individual performance. This conflict has to be balanced in such a way that it does not adversely damage the cohesion of the organisation and the achievement of longer-term goals.

Getting the investment side of the equation right is the area where interests tend to be aligned the most. That said, there are many areas of ambiguity. Returns, for example, can be broken down into stock selection, sector selection, country selection and the asset allocation interaction effect between all of these. In a firm with a strategist, a portfolio manager and a sector analyst all contributing to the performance of the same fund, problems can occur on attributing the performance to the correct individual. A robust and clear investment process helps address such ambiguity and therefore lays the groundwork for a clearer reward scheme.

Within many firms, management responsibilities are carried out by se-

nior investment staff, a practice that results in a blurred line between compensation and deliverable metrics. Avoiding such ambiguity is where good and bad remuneration policies differentiate themselves. Indeed, it is best to avoid such conflicts of interest in the first place by having both dedicated management functions and dedicated investment functions.

Remuneration policy is one area where firms tend to dislike transparency. If remuneration policies are known, it leaves a firm open to competitor poaching. A lot of companies, however, give information anonymously to industry pay aggregators such as Greenwich Associates. It is therefore possible for management to know in which quartile their pay policies lie. The worst practice is to wait for staff to be poached and then make a counter-offer.

Typically, insurance companies and pension funds have less focused and lower quartile compensation, while hedge funds and larger fund managers tend to pay top quartile compensation. Whatever the focus, a fund management firm needs to regularly review its compensation. It is perhaps one of the hardest things to get right.

How to Decide on Compensation

Compensation is always one of the most contentious issues in any firm. It is human nature for employees to overestimate their own market value. As a result, it is important to communicate the policy clearly. The worst job advertisements, in this respect, are those that advertise “attractive or competitive remuneration”, but offer no other information.

Within fund management, the focus of remuneration has been on ensuring that pay packages are logically aligned to both the fee that the underlying funds generate and the added value that is being delivered. This is best done mechanically, and mutual fund or hedge fund structures are perfect for such arrangements. Fund managers receive one or, in some instances, two types of fee which can be linked to compensation. The first is a management fee, which is generally a low percentage of the assets under management. The second, less common, type of fee is a share of the profits, generally referred to as a performance fee, or carried interest.

The best way to link compensation to performance is to decide prior to any employee evaluation the rewards associated with achieving the organisation’s objectives. The evaluation process is typically done in a 180- or 360-degree format. Such assessments are designed to provide individuals with a snapshot of their skillset taken from a variety of angles, including ratings from their managers, direct reports, peers, customers and themselves. These assessments present the participant with feedback on areas of strength and areas for improvement, and provide a foundation for the creation of targeted training and development plans. The assessments should be conducted separately from the pay review but allow the line manager to make a recommendation on pay levels.

Table 9.1 presents guidelines for a variety of fund management styles. As can be seen, beta managers and alpha managers are compensated in different ways. This is down to the commoditisation of the beta manager. Exposure to beta can be obtained by a number of financial instruments at a fairly low cost. As such, salaries are not as high as for fund managers who can justify higher fees due to the alpha they deliver.

Table 9.1 Fund managers pay guidance

	Beta manager	Team player	Alpha manager
Base salary	Lower quartile	Median	Upper quartile
Short-term cash bonus	Lower quartile to median quartile	Median	Upper quartile dependent on performance
Long-term share bonus	Low	Medium	High
Pensions and benefits	High employer contribution and comprehensive	Mid-market employer contribution	Low employer contribution backed by voluntary payments
Experience required	Low	Medium	High

It should be remembered that cash compensation is taxable and deferred payment and/or stock options can often be a more optimal choice. The latter provide employees with the right, but not the obligation, to purchase shares of their employer's stock at a certain price for a certain period of time. There are some issues that can arise when a public stock price falls for reasons unrelated to the fund manager, such as happened in the 2008–09 credit crisis. These, however, have to be addressed on a case-by-case basis.

In remuneration matters, there are a few issues that every firm should be cognisant about. The first is that salary levels rise fairly fast as experience is gained. Graduates expect to be compensated for their new-found experience or they leave, taking their new-found experience with them. If a firm wants to avoid training its competitors' future staff for free, it has to address this aspect. The second issue is that fund size matters. As assets under management increase for a portfolio manager, the salary should also be addressed as their market value goes up. The third issue is that salaries go up but rarely go down. As such, fund managers are poorly prepared for bear markets. A contingency plan for headcount reduction should always be available.

Communication at the employee level is crucial to any successful salary scheme. In the absence of an existing link between pay and performance, the next best thing is to decide on an appropriate reward (a salary increase, an *ad hoc* bonus, or some combination of the two) and carefully explain the particular achievements that justify the pay increase to the employee. That explanation could then serve as the basis for the following year's performance plan.

There are a number of industry-specific issues related to compensation in the fund management industry. One such issue is the size of pay packets. The large dispersion in pay levels throughout fund firms can give rise to jealousy and inappropriate behaviour. Another problem can be deference to highly paid stars that may be considered above reproach. Skewed incentives can affect the risk-taking behaviour of portfolio managers, and that can have performance implications.

Guidance on front-office pay can be found on the CFA Institute website.

The website of the Chartered Institute for Securities & Investment in the UK provides some advice on back-office pay as well.

The CFA Institute also produces a regular compensation survey. This was last undertaken in 2007, and unfortunately suspended during the credit crisis due to public concern about compensation levels in the industry. In the survey, equity portfolio managers reported their compensation comprised 39% base salary, 49% cash bonus and 12% long-term incentives such as stock options, restricted shares and phantom shares. Bonuses made up 30–50% of total compensation for most buy-side occupations. Among US-based professionals with less than 10 years of experience, the median equity portfolio manager's compensation was US\$398,000 for five to under 10 years, and US\$205,000 for under five years. Fixed income managers at those experience levels earned US\$210,000 and US\$126,000, respectively. The average highly experienced equity portfolio manager based in the US was reported as earning US\$499,000 in total compensation.

High-level criteria

As the industry has evolved, many firms have revisited the design of high-level criteria for their incentive structures. The rise of the hedge fund and increased financial complexity has necessitated this. It is difficult to be prescriptive about such high-level criteria. Pay policies vary widely between firms, and within firms between different levels of staff. That said, the high-level criteria for remuneration policies should reflect many factors, such as the nature of the business undertaken and the culture of each institution. Once these have been incorporated, senior management should ensure that:

- ◆ pay policy is aligned to the underlying assets under management;
- ◆ pay rewards experience and track record; and
- ◆ team-based pay rewards the value added (performance).

The reward for getting the above high-level criteria correct is improved performance. Research has found that, compared with other employees, highly engaged employees are 1.5 times as likely to be top-performing workers and are nine times as likely to believe passionately in what their organisation stands for. Arguably, the highest-level criteria are those for “performance-related compensation”. These will be addressed next.

Performance-related compensation

Paying performance-related bonuses is an integral part of what is termed, by academics, the “agency relationship”. In fund management, avoiding agency bias and getting the performance-related element right is seen as integral to success. Because of this, it is important to understand that there is an investment return element to the way compensation schemes are designed for portfolio managers. The majority of compensation packages in the industry do in fact display a fair amount of alignment of interests and incorporate performance-related bonus schemes.

In reality, firm success factors, such as profitability and assets under management, have greater impact on bonuses than client success factors such as investment performance. Once the board has determined how to address the

balance between the firm and the individual, there are five separate steps that need to be followed in order to construct a firm-wide bonus programme. They are:

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- ◆ calculate the bonus fund;
 - ◆ determine bonus eligibility;
 - ◆ select bonus band;
 - ◆ select salary band; and
 - ◆ calculate individual bonuses.
-

In addition to determining the pool, there are a wide range of factors that have to be taken into account regarding the formation of both single- and multi-factor bonus schemes. These include:

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- ◆ assets under management (incentivising sales);
 - ◆ financial performance/profits;
 - ◆ individual performance based on specific funds/sectors/countries;
 - ◆ information ratio (customer satisfaction);
 - ◆ number of funds/portfolios managed;
 - ◆ project work targets;
 - ◆ qualifications;
 - ◆ quality of analytical input (quantitative);
 - ◆ team effort; and
 - ◆ time management (number of company or client visits).
-

Management should keep in mind that a successful bonus programme is one that has an internal control structure and a sensible upfront design, offers attractive individual bonus rewards and is well-managed.

Long-term incentives

It is in a firms' interest to make incentives as long term as possible, as they tie the employee to the company. Unsurprisingly, employees prefer short-term incentives. Long-term incentives are differentiated from bonuses by the time horizon over which they are awarded, typically at least three years. They are likely to take the form of grants of shares or phantom options. To be successful, they should be subject to performance criteria having been met and are often designed to be lost should an employee move company.

Share options are considered long-term incentives if they are conditional on performance. Most companies only make such awards if certain hurdles are overcome. These include:

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- ◆ minimum targets for factors such as fund raising, performance or client retention – under such schemes minimum targets have to be reached or there is no bonus pay out;
 - ◆ threshold profit levels, whereby a threshold profit level must be reached before any payments are made; and

- ◆ management discretion schemes where organisations maintain a degree of discretion over the payment of bonuses.

When considering long-term schemes, non-cash benefits should also be included in the discussion. Pensions, for example, are an excellent way of aligning the employee with a fund manager in the long term. In the short term, such elements can include tangible goods or services such as a company car, and as well as other benefits from different ways of working, such as flexible working, longer holidays and the opportunity to take a sabbatical.

Leadership

Leadership skills are essential in any successful fund management firm. Good leaders define an organisations culture, direction and work ethic. It is their job to build trust and engage others to get things done. The benefit of having appropriate leadership and motivation is that it helps the fund management firm achieve:

- ◆ higher staff retention – leading to consistency in investment style;
- ◆ higher levels of productivity;
- ◆ more innovation and creativity;
- ◆ higher profits; and
- ◆ a better reputation among both potential employees and clients.

It is a common mistake to think that leaders only exist at senior levels in organisations. Strategic leadership is just one component of the directing function. There is also operational leadership. Operational leaders usually have responsibility for a departmental function or functions.

A head of a department cannot be just a leader, they also need formal authority to be effective. This authority is addressed in the following job descriptions.

The Chief Executive Officer

The chief executive officer (CEO) is the person who provides leadership and direction in any firm, be it a fund manager or otherwise. Their job is to coordinate all activities on both the investment and business development side. In this respect, they are the leader of the team. They should therefore have not just business acumen, but also investment skills, charisma and vision.

Although their responsibilities are far ranging, it should be understood that the CEO can delegate to, among others, their chief investment officer and chief operating officer. That said, the CEO is the person who is ultimately accountable to the board of directors. As the buck stops at their desk, they are also responsible for ensuring the firm is in compliance with legislation and that its relationship with regulatory bodies is in good order. Their chief compliance officer is delegated with this task.

In terms of key responsibilities, the chief executive officer should:

- ◆ prepare contingency planning;

- ◆ coordinate employee recruitment and retention with the head of human resources;
- ◆ determine strategy and planning and hopefully grow the business;
- ◆ ensure the fund manager is a customer-driven organisation;
- ◆ maintain the firm's professional standard in all communications and services to clients;
- ◆ organise resources to meet goals and guide resources to meet goals;
- ◆ hold overall responsibility for the adequacy and soundness of the company's financial structure;
- ◆ oversee the investment department and endorse the investment style;
- ◆ prepare the budget with the chief finance officer and department heads; and
- ◆ provide timely and accurate reporting to the board of directors.

Of the above, clearly the most important role of the chief executive officer is that of leadership. Leadership in a healthy company means "business development". In this respect, the CEO must be the key driver behind the marketing strategy and product focus of the company. Their head of marketing and head of client relationships should support them in this. That said, the firm's investments and operations also have to be up to the task. Their CIO should have a clear vision of the uniqueness of the firm's investment proposition and their COO should ensure that the firm delivers on settlement and processing at the back end.

Obviously, everything the CEO does has to be in accordance with the goals and objectives of the firm's board strategy, although it is up to them to direct this strategy. In this respect, key operational, technology and budgeting plans will be done in co-ordination with the respective department heads.

The CEO should never delegate the ultimate accountability for the morale of the employees, the image of the company or its standing in the financial community at large.

Transitioning to a New CEO

A new CEO requires an effective transition process. In order to do this, a fund manager and its board should have a strong idea of what it wants from its CEO. For a start, they should avoid the tendency to define a new CEO in terms of the previous CEO or founder. It is far better to focus first and foremost on the organisation's needs.

It is important to realise that the CEO will not necessarily "hit the ground running". It takes time to learn any new business and the senior management should make the process as smooth as possible for the new incumbent. The first thing to do is to send a letter to key stakeholders, announcing the new chief executive, when they are starting, and including something about their background. Clients do not like uncertainty and, as with changes in senior investment personnel, have a tendency to expect to be informed.

It is a good idea to schedule the first few weeks of the new incumbent's diary. Senior management should meet with the CEO as soon as possible to get them up to speed on clients, areas of strengths and weakness, as well as any strategic information that may be relevant. It is best to do this based on an agenda in order to avoid political manoeuvring. The new CEO should, in

turn, review the organisation chart, the current budget, the strategic plan and the legal contracts of employees and clients. Obviously, in order to optimise their time, they can delegate the making of summaries for all the above.

The personnel department should schedule any training on front- and back-office systems unique to the firm. It should also ensure the CEO has relevant access, passwords, overview of software and documentation and know where to go to get questions answered.

The Chief Operating Officer

The chief operating officer is, in effect, the CEO's right hand man. They are the overseer of the company's operations, particularly in the area of ensuring that the investment middle- and back-office functions clearly support the front office. It is their job to ensure that the right systems are in place and that these are compliant with regulations.

Essentially, the COO should ensure that there is seamless support for the investment activities of the firm. In this respect, they should have a background in investments, preferably in operations.

There are three basic models on which a COO can model how they work:

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- ◆ by overseeing all operational and administrative functions – in this model they do not relate directly to individual departments, but other senior managers are responsible for those departments themselves;
 - ◆ by overseeing all investment functions, while the chief financial officer or another senior executive oversees the administrative functions; and
 - ◆ by overseeing all internal functions.
-

Whichever of the models chosen, the COO's responsibilities include human resources, finance, information technology, administration and strategic planning. In addition, the COO should be responsible for supervising all staff to ensure efficient and effective client service and operations. In this respect, they are often charged with:

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- ◆ providing general staff management and allocating staff resources while monitoring professional development;
 - ◆ assisting financial oversight, including input into budgeting, growth modelling and cashflow management;
 - ◆ providing leadership and oversight for all operational functions;
 - ◆ contributing to strategic decisions as a member of the firm's leadership team;
 - ◆ overseeing the development of systems and processes that support the firm's business development activities;
 - ◆ oversight and managing all projects;
 - ◆ responsibility for business continuity plans;
 - ◆ co-ordinating payroll and other human resource issues; and
 - ◆ ensuring legal, regulatory, taxation and company filings are in order.
-

Responsibility for the systems and operations of the business requires more

than just organisational ability, it requires planning ability. The COO has to ensure the business can meet any challenges, process any investments, and deliver on its product offerings, as well as addressing any regulatory and all risk control requirements, all within budget.

The Chief Financial Officer

As in all businesses, it is essential that the finances are kept in good shape, and this is no less important for fund management firms. The person required to do this is the chief financial officer (CFO). They have extensive responsibilities for internal and external reporting, and the accounting and finance departments report to them.

The CFO must be a member of recognised body of professional accountants. Accountants are classified into four categories: public, managerial, government accountants and internal auditors. Clearly, the right background and training matters and, in this respect, the CFO should be a qualified public accountant.

It is also the job of the CFO to furnish necessary financial information to the board of directors and senior management, along with their analysis and suggestions. The CFO's department should produce annual business plans, cashflow projections, forecasts and long-term plans, in addition to day-to-day ledger processing. The financial information should include:

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- ◆ budgets, including capital, manpower and overhead budgets along with variance analyses; and
 - ◆ quarterly operating results of the company as a whole and in terms of its operating divisions or business segments.
-

The CFO also has legal responsibilities towards the accounts and financial statements, and they have to sign these before they are sent to the relevant authorities. Regulatory risk reporting and capital adequacy reports are also produced by their department for the head of compliance.

The Chief Investment Officer

The chief investment officer is the leader of the investment function. As such, they are responsible for delivering investment outcomes by leading a rigorous process of portfolio analytics, construction and management. Their role involves responsibility for the day-to-day administration of the investment process.

In their role as the leader of the investment process, the CIO is responsible for the monitoring, implementing and consistency of investment decisions within the confines of liquidity needs and risk tolerances. To achieve this they:

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- ◆ serve on asset allocation committees;
 - ◆ oversee portfolio construction and analysis;
 - ◆ undertake ongoing management of the products and processes;
 - ◆ coordinate and work with internal team members and external clients;
 - ◆ contribute to the development of "trusted advisor" relationships; and

- ◆ position the firm and themselves for new clients.

The CIO should either determine asset allocation or instruct a head of asset allocation to do that for them.

The unwritten job specification is that the role requires the individual to develop creative solutions for the firm's clients. They are essentially responsible for implementing the client's investment strategy and to support lead client relationships. In this respect, it is important to stay current and refine the investment offering. They should work closely with the existing resources, including the head of client relationships and the head of marketing.

The CIO should promote the company's image and, if necessary, author articles and be a spokesman on the markets. It is as important to build client rapport and confidence as it is to deliver investment objectives.

The CIO oversees a team of professionals that have responsibilities such as managing and monitoring investment activity, managing the funds and conducting analysis. The individual must be rigorously analytical and resourceful. They should be knowledgeable about how to get things accomplished through both the formal and informal channels.

The key skills required in the role are communication, teamwork and leadership. Management is an important part of this position. The CIO must create an environment of accountability, particularly in respect of investment performance.

The Head of Trading

The head of trading is responsible for implementing optimal trading strategies for the CIO and their portfolio managers. Alpha can be lost as well as gained. In this respect, the trading function is also a key one.

All fund managers rely on the trading room to execute buy and sell orders through brokers or in the market. The position requires familiarity with financial markets, strong computer proficiency and highly developed organisational, communication and analytical skills. Trading requires the ability to multi-task in a fast-paced environment. The head of trading should:

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- ◆ execute and process all trades with best execution;
 - ◆ scan the markets for opportunities and projections, and review recommendations based on thorough research and analysis of different sectors, industry and companies, in order to set price targets;
 - ◆ review all securities transactions to ensure that trades conform to regulations; and
 - ◆ supervise and evaluate the performance of individual traders.
-

The head of trading is the person responsible for the continuous supervision of processing and execution of all fund management deals in the market. Additionally, they must continuously monitor and review trader's execution and the execution of trading strategies.

Trading desks are often split into different assets classes and the head of trading should have the skills to oversee these different areas. In addition, the role requires preparing and verifying data, and order confirmation accuracy.

Normally, the head of trading oversees the function of post-trade processing, reviewing and analysing transaction costs. Technology assists in this.

The Head of Technology

The head of technology is responsible for all systems and data used by the fund manager. They are also responsible for the enterprise backbone and architecture. The main duties of the role are:

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- ◆ to support technology staff in the identification of business needs;
 - ◆ to lead all commercial contract negotiations with relevant suppliers;
 - ◆ development;
 - ◆ infrastructure;
 - ◆ third-party interfaces/business analysis; and
 - ◆ desktop support.
-

The head of technology is essentially the guardian of the firm's data. Such data includes all holdings and transactions, as well as real-time data and news, supplied by such vendors as Bloomberg and Reuters. The systems to support this include the back-office investment accounting system, the primary records of the fund manager's holdings. Other important systems include order management, dealing and fund analysis decision-support systems.

The head of technology is responsible for the sourcing of all external technology hardware, software, telecoms and services. In this respect, one of the functions of the role is to manage commercial negotiations with relevant technology suppliers and liaise with the legal team to ensure favourable commercial terms that mitigate business risk.

The head of technology should ensure everyone is on the same page by adopting a common terminology platform. In order to do this, they should use the same definitions for abstract concepts such as architecture, software lifecycle and data modelling. Their department should apply standard performance measures and the head of trading should ensure the firm adheres to established architecture guidelines. It is their job to co-ordinate the guidelines that make it easier to connect systems into a seamless network across the organisation.

The Head of Compliance

The head of compliance, the compliance officer, is the person responsible for driving the implementation and maintenance of the firm's compliance policy. They drive compliance and process, ensuring compliance with legislative and regulatory obligations, effective risk management and ongoing compliance culture.

The head of compliance also plays a key role in ensuring the maintenance of regulatory and internal standards in relation to an asset manager's operational and commercial activities. They are responsible for driving the implementation and maintenance of compliance policy. Their various roles include:

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- ◆ acting as compliance oversight and money-laundering reporting officer;
 - ◆ acting as primary contact to the group in relation to all regulatory matters;

- ◆ acting as primary contact between the group and the relevant regulatory/ external bodies;
- ◆ interpreting and providing advice on applicable rules, regulations, policies and procedures;
- ◆ conducting periodic reviews to ensure compliance with relevant regulatory and exchange requirements, as well as internal policies and procedures;
- ◆ ensuring all staff are kept informed of regulatory changes;
- ◆ managing and developing compliance staff and providing day-to-day oversight for departmental staff members; and
- ◆ preparing and submitting reports to the regulator.

The head of compliance is part of the leadership team and should have a strong focus on fostering relationships at a group and business unit level. They should provide commercial advice and facilitate the best outcomes in order to deliver a pragmatic and robust compliance and risk framework.

The head of compliance should also provide compliance advice and guidance to company businesses, particularly the investment and product offices. This means being responsible for the delivery of business solutions relating to the firm's product take-on and management policies and processes. In this respect, they should assess and provide formal compliance input into new product propositions and the relevant approval processes.

The Head of Risk

The head of risk is responsible for designing processes, policies and procedures to identify and manage threats to the investment performance and track record of the company. In this respect, they are responsible for market, credit and regulatory risk requirements. Responsibilities range from assessing counterparty risk, through to analysing capital requirements and ensuring compliance with client service level agreements (SLAs). They should therefore be responsible for:

- ◆ planning, designing and implementing an overall risk management process for the fund manager by developing operating models;
- ◆ risk assessment which involves managing the process of analysing upside and downside risks, as well as identifying, describing and estimating the quantitative and qualitative risks affecting the investment mandates;
- ◆ risk evaluation which involves comparing estimated risks with risk criteria established by the management; and
- ◆ risk reporting in an appropriate way for different audiences.

In addition to this, the head of risk needs to have a close working relationship with fund managers and investment decision makers. They are responsible for all aspects of credit risk policy across multiple asset classes, as well as credit risk measurement and management.

The head of risk should establish a highly robust, data-centric risk function with comprehensive analytical credit risk reporting informing all as-

pects of product and pricing. To achieve all of the above, the head of risk must have sufficient understanding of operational and market risk to fulfil their function. Often, they work closely with the head of performance.

The Head of Performance

The head of performance is responsible for the leadership of the performance management function. They should be able to work with the board, executive director and other members of the senior management team, such as the CIO. This interaction should formulate the approach to performance management.

The head of performance has to set key performance indicators (KPIs) in the light of business and project plans, monitor and report on funds and mandates relative to benchmarks and indexes, as well as guiding production of marketing materials and communications. In summary, they must:

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- ◆ provide support for the CIO and his team;
 - ◆ produce and present specified daily, weekly and quarterly reports;
 - ◆ produce data for other departments (actuarial and finance) within time constraints;
 - ◆ produce periodic risk-monitoring reports for other departments (audit, secretariat and compliance);
 - ◆ produce performance and attribution data for the CIO, including the checking of returns from external measurement associates;
 - ◆ update investment controls and statements of investment principles for all funds on a periodic basis; and
 - ◆ assist in maintaining and updating performance and attribution for marketing support.
-

The performance function has a lot of ethical responsibilities. As such, there is a responsibility to promote the values and ethics of the firm in all aspects of their work.

The Head of Marketing

The head of marketing is responsible for directing the firm's overall marketing and strategic planning programmes and corporate communications. Their job is to facilitate client development through marketing and client services programmes. The marketing manager duties and responsibilities include, but are not limited to:

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- ◆ designing, implementing and facilitating the annual marketing plan for the firm;
 - ◆ supporting and facilitating the development and implementation of section business/marketing plans;
 - ◆ planning and administering the firm's marketing operations budget;
 - ◆ supervising the firm's request for proposal (RFP) process, including soliciting RFPs from desirable prospective clients and writing proposals for new business;
 - ◆ participating in presentations and "beauty parades";

- ◆ providing ancillary support to the marketing process, such as overseeing the preparation of indicative term sheets; and
- ◆ overseeing business development activities as a business development coordinator.

In effect, the head of marketing role both manages and coordinates all marketing, advertising and promotional activities. This covers public relations and promotion. Their role therefore requires oversight of market and customer research, current market conditions and competitor information.

The head of marketing is the person who develops and implements marketing plans and projects for new and existing products. This includes managing the marketing plans and projects. To do this they must monitor, review and report on all marketing activity and results determine and manage the marketing budget. They work closely with the head of client relationships.

The Head of Client Relationships

In a similar role to the head of marketing, the head of client relationships is the one person responsible for fostering the existing client relationships of the firm. They act as a go-between between the portfolio manager, team and client. Their role is to organise and implement client relations, including:

- ◆ client satisfaction surveys;
- ◆ client development activities;
- ◆ client skills training;
- ◆ special events;
- ◆ management of mandate guidelines and constraints;
- ◆ setting and monitoring key performance indicators/indexes with clients;
- ◆ developing new projects and business opportunities, project and business planning; and
- ◆ leading on marketing, communications and stakeholder management.

The head of client relationships is the main point of contact for key clients, to meet their demand for non-transaction related issues and use of technology. They are responsible for gathering client feedback and details on their needs, and should proactively react to all requests by offering existing or new solutions. In their day-to-day role, they should liaise with the front office and all operations areas.

An understanding of industry standards, protocols and technology is an advantage for this position. The purpose is to increase client satisfaction and create a win-win situation in terms of costs and improved processes for both the client and the investment team and operations.

Women in Fund Management

While half of investment capital comes from women, women are severely underrepresented in the industry. Only 10% of traditional fund managers and only 3% of hedge funds have women in senior management roles. In order to foster greater top-level female talent, the firm should:

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- ◆ apply best practices developed by diversity professionals to recruit, train and retain top talent, including women;
 - ◆ create female role models and call attention to the excitement and rewards of a career in fund management;
 - ◆ make career paths in fund management more visible and appealing to college and graduate students; and
 - ◆ provide mentors and information about educational and experiential requirements and other kinds of support to prepare women for senior management.
-

The lack of female representation is all the more surprising when considering that academic research has found that, on average, women tend to be more consistent investors, holding investments longer and undertaking greater analysis than men. In particular, there is even less representation at the very top of the firm, at the CEO level.

Establishing an Employee Review Process

In order to keep the firm running smoothly and to ensure that all employees are undertaking their roles and responsibilities, it is a good idea to establish an employee review process. Even with an annual performance review in place, it is good practice not to wait for the review before providing employee feedback. The objective of an annual performance review should be to summarise what has already been discussed throughout the year. When giving the review, managers should:

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- ◆ avoid non-work-related issues;
 - ◆ focus on the employee's talents and strengths at work;
 - ◆ look for ways to develop their future goals and performance objectives; and
 - ◆ instigate plans that can be measured and assessed at a later date.
-

In the review process, line managers should avoid giving poor performers a "good" performance review. This is especially important if an employee leaves and is aggrieved. Employment lawyers point out that it is a plaintiff's annual performance reviews that most often work against a company's defence in any lawsuit (especially if the annual performance reviews are very positive).

Another recommendation for such reviews is to keep the performance review and the process as simple as possible. It is also good practice to facilitate the performance review process with a simple and easy-to-use form. All such reviews should encourage teamwork.

How to Build Team Spirit

Even the best-qualified and most experienced fund managers need to work as a team (and that includes star managers). Indeed, it is crucial that all portfolio managers work well with operations, compliance and marketing departments.

The best way to build a strong team is to focus on:

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- ◆ setting out a vision;
 - ◆ getting all employees to contribute and publicly recognise their efforts afterwards;
 - ◆ empowering people and allocating resources to the right areas;
 - ◆ intervening when needed to teach skills and help the team solve problems; and
 - ◆ encouraging debate.
-

There is a social aspect to having a team spirit, as it helps to make the work enjoyable. At the same time, teamwork can stimulate innovation as interaction between team members throws up new ideas for solving problems. People will feel more loyal to the team, and not want to let others down.

A lot of team spirit comes down to reflecting on how the team interacts with itself. In this respect, it is a good idea to gather the team's opinions on how well the above metrics worked.

Maintaining an Employee Handbook

On a final note for this chapter on job functions, it is worth mentioning the importance of the employee handbook. This volume is often thought of as excessive paperwork by management. This is a mistake in a people business. Such a manual is a tool that can help increase morale and ensure the smooth working of the softer side of the business. This is because, when employment practices are in writing, employees feel they are being handled consistently and fairly. The handbook should contain:

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- ◆ information about employee pay and benefits (such as holiday and insurance);
 - ◆ expectations about conduct and discipline policies;
 - ◆ guidelines for employee performance reviews (such as how and when they are conducted);
 - ◆ policies for promotion or demotion to a certain position; and
 - ◆ rules and procedures.
-

A well-written manual can increase productivity, because employees know they can get the information they need about benefits, policy and procedures without interrupting normal workflow. In addition, handbooks and manuals provide the company with documentation that they are in compliance with national laws.

It is a good idea to have the firm's lawyers insert various disclaimers into the manual. Likewise, it is important to show how the company will handle violations of policies.

Always require a signed acknowledgement that the employee has reviewed and received the manual. This signed document should be placed in their personnel file with a copy to the employee for their records. Likewise, date any revisions and have the employee place them in their manual with a new acknowledgement signed and filed.

Conclusion

This chapter has focused on the human component of the fund management industry. The organisational matrix, however it is contrived, revolves around highly qualified professionals.

Getting the compensation component right is paramount. This chapter has shown that best way to do this is by linking pay to performance. Performance-adjusted deferred compensation arrangements are now the norm.

It is important to delineate job descriptions, as well as roles and responsibilities. From the CEO down, the organisation has to be aligned. The front office should have autonomy on investments and the back office should be efficient at settlement and processing. These positions should be supported by effective and well-supported marketing personnel. Once again, it should be reiterated that fund management is a people business. That said, it is also a business that needs clients and their acquisition is the subject of the next chapter.

10

Client Acquisition

“Effective marketing is really quite simple: Identify your destination (goals). Determine how best to get there (strategy). Get started (tactics). Measure your progress (reporting and analysis). Make course corrections as needed (continuous improvement).” *Mac McIntosh*

Client acquisition requires sales and marketing. These are often considered easy, but in reality they require significant attention, especially as they are the key to growth. As Mac McIntosh explained, there are five main steps to client acquisition, starting with goals and strategy, progressing through tactics to reporting and analysis, and then the need for on-going attention.

Although the term “sales” is an obvious one, the term “marketing” is often misunderstood. The latter is the pursuit of those “sales” and incorporates, or at least impacts, all of these activities:

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- ◆ business development;
 - ◆ product development;
 - ◆ market development;
 - ◆ market research;
 - ◆ competitor analysis;
 - ◆ pricing strategy;
 - ◆ public relations;
 - ◆ customer service;
 - ◆ promotions;
 - ◆ brand development; and
 - ◆ company/corporate identity.
-

As can be seen from this list, much of the traditional approach to marketing is product-driven. In fund management terms, this means the promotion of collective or segregated portfolio management services. The fund manager

begins the business development process by designing and marketing the best fund possible – at least that is what theory suggests. The marketing team is then charged with trying to get customers for the product. Needless to say, this does not always work.

With so many sources of assets, an unfocused approach to any goals by a marketing team can be unrewarding. There is little point spending resources on an account that will only yield the same, or less, in fees. This is where tactics and strategy can make a big difference.

In the next stage, reporting and analysis, investment performance has always been assumed to be the primary criterion for selection of a fund manager. Unfortunately, things are not quite that simple. In reality, it is the perception of investment performance that matters. Because of this, the sales and marketing department can have an impact on whether the firm attracts assets, even during periods of underperformance. Client acquisition is therefore as much an art as a science.

As far as the science of customer acquisition goes, in order to achieve a focused implementation of the marketing concept, appropriate organisational structures and resources must be in place. In practice, this means that everybody within the organisation, from the chief executive down, must be committed to serving customers and to building long-term relationships. This latter is where the art of customer acquisition kicks in.

The author would suggest that one of the most successful approaches to client acquisition is to be customer centric. In this approach, the selection of the customer niche that will support the product comes first. Such a focus has profound implications. It means that fund managers have to continually research both customer requirements and competitor activities. It requires firms to have appropriate customer-orientated aims and objectives, and pursue continuous improvement. In other words, it requires fund managers to strategically plan in order to develop the business and win new clients.

Business Development as a Means of Winning New Clients

Business development is key to client acquisition. It involves strategic relationships, appropriate product and good old-fashioned marketing. For marketing, business development professionals tend to differentiate customers into two key types:

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- ◆ transaction buyers – customers only interested in price or product; and
 - ◆ relationship buyers – customers looking for some form of relationship.
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As far as transaction buyers are concerned, the investment process is everything. It is what has been sold to the client; it is what delivers alpha, as opposed to beta. Alpha is the risk-adjusted return which is attributable to the skills of the portfolio manager. They can only achieve that through a rigid process that is repeatable in future. The portfolio manager who departs from this agreed process might still produce alpha, but if the process is not being followed then the client is not being given the service they have signed up to. The client has “bought” the performance “promise” they want. If it is not delivered, these transaction buyers become dissatisfied. The relationship buyers are more forgiving, which illustrates why building relationships is so important.

It is possible to change transaction buyers into relationship buyers through the process of relationship building. One aspect of this is to prepare the client for the scenarios under which their portfolio will underperform, which has to happen at some point. It makes sense for expectations to be managed, and at the same time to show sympathy for the client's investment outlook.

In this respect, the author would caution that fund managers and their clients often have different time horizons as a result of the difference between strategic and tactical asset allocation. In a bear market, the portfolio is probably going to go down. In relationship building it is always a good idea to explain this beforehand. If tactics do not work in the short term, the long-term strategy will deliver the required results. Clients should be shown the distinction between tactical and strategic approaches. It is a common mistake by many managers to keep up contact with their clients in the good times but not the bad. Clients or plan sponsors are not as concerned about the good times as they are about the bad. It is in periods of underperformance that good communication becomes crucial. It is natural to prefer giving good news to bad news, but this is not conducive to business development.

After the client has been won, it should be the client services team that manages the relationship, not the portfolio manager. The portfolio manager's job is to deliver alpha for the client. The marketing team, and the client, should be content to let them get on with the job and make no further demands on their valuable time. Everybody wants to shake hands with the person managing the investments, but that is not what the firm should want the portfolio manager to be doing all the time.

Basic Foundations of Client Relationships

The building block of any marketing strategy is based on what is termed "the four P's of marketing". In fund management there are two further factors: performance and personality. The six fund management "P's" are therefore:

- ◆ **Product.** This is the portfolio that is being marketed. It should be viewed as more than just a fund in a legal wrap. It should be viewed along with the philosophy, process and values that the product represents. Indeed, it is sometimes possible to get away with not having the best performing product in the market. Client relationships matter.
- ◆ **Price.** This is the management fee. It cannot be divorced from the performance and characteristics of the product offered. Indeed, fees detract directly from performance. That said, they are not the most important deciding factor, although clearly some funds, particularly index funds, compete on price. That said, in fund management outperformance does command a superior price.
- ◆ **Place.** This is sometimes thought of as irrelevant in a numbers-based business. If this were true, however, the industry would be far more global in terms of client concentration. Many mandates have a home country bias and are still based on relationships. It should be remembered that relationship managers are only cost effective within a fixed travel radius. Financial and legal issues are mostly set locally.
- ◆ **Promotion.** This is a key element which many fund managers can be very bad at. This does not just apply to advertising but areas such as

- sponsorship, and public and press relations. The promotion strategy should be aligned with the brand strategy.
- ◆ Performance. This goes without saying. However, it is often the perception of performance and not the performance itself that matters. Perception is a marketing function.
 - ◆ Personality. In the context of fund management, this means the portfolio manager. Many clients associate the performance with the individual rather than the product or process.

Once all these P's are in place, the next step is implementation, followed by review. Russell, the world's largest investment consultant, breaks this down into policy, strategy, management, execution and control (see Figure 10.1).

Figure 10.1 Integrating clients with fund managers

Source: Russell

Fiduciary level	Plan		Implement and review		
	Policy Fund objectives asset allocation internal/external	Strategy Asset class strategies and structure	Management Manager meetings and implementation	Execution Security selection	Control Review for compliance vs objectives
"Governing" board of directors	Oversees	Oversees	Oversees	Oversees	Review investment committee decisions
"Managing" investment (sub) committees	Decides	Decides	Oversees	Oversees	Review staff decisions
"Operating" investment staff	Recommends	Recommends	Decides	Oversees	Review staff decisions
"Operating" investment managers		Consulted	Consulted	Implements	Compliance vs. guidelines

Where the fund manager is located at the operating point of the value chain in Figure 10.1 highlights the dependence on distribution to reach the client. Marketing efforts have to be directed not just at the most senior level – the board of governors in Figure 10.1 - they should instead be directed at every component of the value chain, including the investment committees and operating investment staff.

In order to achieve this product architecture should be designed with execution in mind. This means it must be appropriate to the fund manager's skills and expertise. It should also be appropriate to distributors to ensure their awareness and willingness to introduce clients to the fund manager. The author believes it is incumbent on the gatekeepers, investment buyers and asset owners to convince them that the fund manager is best suited to select the optimal investment package on their behalf. Some or all of these parties may be in the same firm or even on the same team, or exist as separate entities altogether.

Portfolio managers do not like marketing and being rolled out to meet with potential clients. After the initial meeting, it is the client services team that manages the relationship, not the portfolio manager. It is communication of the message that is important, not who does the communication.

Communicating the Right Message

As was explained in Chapter 2, the investment process is one of the most important variables – and it has to be communicated. In active fund management, it is the process that delivers alpha, as opposed to beta. The portfolio manager can only deliver alpha through a rigid and repeatable process. As mentioned, a portfolio manager who departs from this agreed process might still produce alpha, but if the process is not being followed then the client is not being given the service they have signed up to.

It is clear, therefore, that the communication message should be performance related the author would suggest. Such communication requires that the firm consider a number of protocols:

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- ◆ communication must be open and honest;
 - ◆ communication must ensure the information given to clients is accurate, fair and clear, and not misleading;
 - ◆ where errors or omissions have occurred, they must be corrected;
 - ◆ honour promises and representations made; and
 - ◆ ensure that products are adequately described, to enable an understanding of what they are and their associated risks.
-

Clearly different clients and personalities need to be communicated to in different ways. Sometimes client relationships are segmented so that there can be a focus on different niches. These can be industry related, size related or even geographic in nature.

Often, communicating the right message to one individual or team ensures it receives a far wider audience. This is called viral marketing. The most creative viral marketing plans use the resources of others to get the word out. Investment consultants are important in this respect. The best viral marketing is done on the Internet.

The Internet's Role in Client Acquisition

The Internet is an increasingly important way of providing information to clients, prospective clients and counterparties. Intranet portal management can be used to provide a collaborative environment, such as a client-reporting interface, schedules, product performance tables, knowledge base, secure documents and communications.

Internet marketing is more than just developing leads, it is about generating quality leads that result in new business inquiries. Firms should use electronic newsletters and/or fact sheets, categorise and segmented according to product interest. Such directed marketing should:

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- ◆ develop a theme or brand behind your monthly newsletter approach;
 - ◆ stock to a preset frequency such as daily, weekly or monthly;
 - ◆ stay consistent;
 - ◆ have a template that is going to get read; and
 - ◆ make sure that communications offer recipients a way to “opt-out” if they choose to.
-

Using the Internet in this way allows fund managers to efficiently generate use from their intellectual and knowledge-based assets. Effective use of the portfolio managers and analysts who manage the funds means their insights can be shared without too much recourse to their time among employees, as well as client groupings.

The Internet also enables companies to easily create, deliver and track data, and allows databases to be updated, such as those of the investment consultant.

The Role of Investment Consultants

The role of investment consultants in the fund management industry cannot be understated. Their main function is to provide impartial advice to institutions on the choice of outside fund managers. The importance of this has continued to rise, especially since the adoption of the prudent man rule in the US. In addition to being prudent, institutions use investment consultants in for a variety of reasons, including:

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- ◆ analysing performance
 - ◆ testing process;
 - ◆ lower fee costs;
 - ◆ managing uncertainty;
 - ◆ managing multiple mandates;
 - ◆ limiting exposure to certain sources of risk which are undesirable to the client;
 - ◆ ethical or unique approaches to fund management;
 - ◆ achieving a certain risk profile;
 - ◆ implementing investment restrictions; and
 - ◆ endorsement.
-

All of these reasons illustrate that analytics are increasingly important. As fund management has increasingly been outsourced by pension funds, trustees have increasingly come to rely on investment consultants. However, the influence of these consultants varies markedly across countries, and seems to be most crucial in those that have larger funded pension schemes, such as the UK and the US, as well as those in which tendering processes are required in the selection of external fund managers, such as in France and the Netherlands.

Traditionally, investment consultants have been of greatest value to smaller pension funds, since large pension funds have been less inclined to hire outside fund managers, or indeed have the resources to do their own screening. Investment consultants provide investment advice to institutional investors, including:

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- ◆ public pension funds;
 - ◆ corporate pension funds;
 - ◆ statutory/corporate reserve funds;
 - ◆ sovereign wealth funds;
 - ◆ university endowments;

- ◆ foundations; and
- ◆ charities.

With this focus, investment consultants assist the above institutional investors with their long-term investment planning and implementation so as to meet their investment goals. These could be a matching of payout obligations, or a fund that wants to maximise its wealth creation. Investment consultants also advise these clients on various investment issues, for example, to what extent clients are clear about their fund's governance arrangements, investment beliefs and the risks involved. More traditional advice includes where the fund's assets should be invested, and which fund management firms are best suited to manage it.

As far as the author is concerned, there are three major elements of investment consulting: strategic research, client consulting and the making of recommendations. Strategic research advises on the evolving landscape of investment opportunities and their implications for investment arrangements. Client consulting, meanwhile, begins with the clarification of a client's mission, beliefs and investment goals, and ends with the recommendation of strategic asset allocation and fund manager selection. These should all be supported by fund manager research. The consultant then reviews the fund manager's business, people and investment processes, and formulates their opinion or rating. This part of the process is the most important for fund managers.

In the traditional form of investment consulting, the client enacts the recommendations, for example, hiring the right fund manager based on a recommendation of a shortlist of candidates advised. In this respect, investment consultants provide "unbiased" investment advice through undertaking research-driven consulting services. For the fund manager, it is a very cheap distribution channel, but an expensive one to ignore.

The new bundled approach is increasingly common and offers potential new distribution channels for fund managers in the form of fund-of-funds or collective investment vehicles. In this approach, investment consultants offer their clients fund-of-funds and/or a multi-manager product that they manage. Again, this represents an opportunity for fund managers.

Answering Requests for Proposals

Investment consultants tend to use a Request for Proposals (RFP) in order to level the playing field and ensure all pertinent questions are asked. A lot of work goes into getting to the beauty parade. Just getting shortlisted requires a formal proposal.

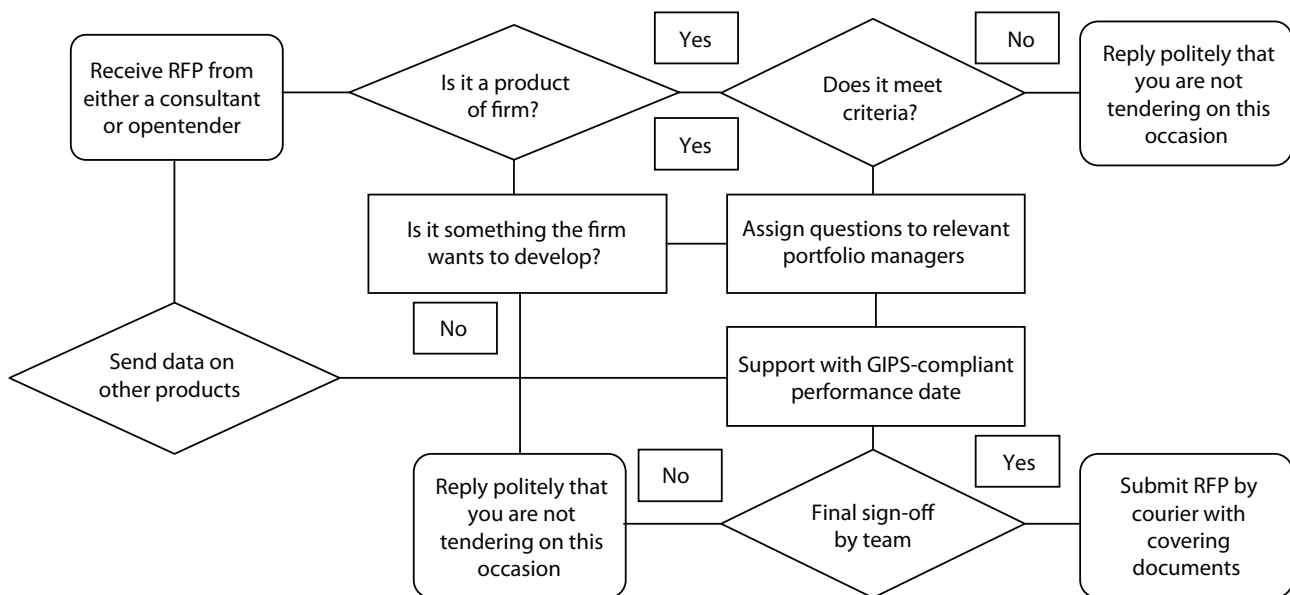
There is surprising variety in how such documents and packages are put together. It is important, however, to spend time putting together an accurate and robust response. The key points to cover are:

- ◆ proposal collaboration that leverages a firm's competence centres, such as the investment strategy group, financial planners, product specialists and compliance;
- ◆ proposal management, including proposal retention, version control and

- archiving;
- ◆ profile validation for consistency, completeness and adherence to the investment policy mandate; and
- ◆ portfolio capture for inclusion of holdings, asset classes, sectors or stocks.

Figure 10.2 shows how firms should answer such requests. The data and pre-qualification are followed by verification and assignment of answers, so that a completed and verifiable set of answers can be signed off.

Figure 10.2 Request for Proposal process



Writing Fact Sheets

Writing fact sheets requires as much attention as answering RFPs. It is often harder to be concise and accurate with fewer words. The fact sheet, however, is an important sales tool and time should be spent on it. It summarises the key information in an easy-to-read and standard form.

Many fund of funds and independent financial advisers use fact sheets as their first assessment tool. The idea is to get the investment objective across clearly. Templates are readily available. For example, Lipper provides a standard solution presented in a clear and concise format with a fund manager’s corporate logo and a disclosure statement of up to 500-characters. Its standard has content such as Lipper indexes and averages, investment objectives, fees and expenses, performance analytics, risk evaluation and portfolio allocations.

Ideally, a fact sheet should start with the investment objective. The information provided should be sufficient for an investor to know if their own investment objective fits well with that of the fund. For instance, an investment objective that states that the fund “will attempt to generate capital appreciation” is not very informative. Details on risk profile, time horizon and concentration or investment process are all pertinent. It would be better to

say the fund “will take a concentrated and focused approach to the long term opportunity using bottom up analytical techniques”.

Equity Fact Sheets

Equity fact sheets are generally produced monthly, and must contain disclosures that are presented clearly, concisely and in a manner designed to maximise comprehensibility. As few investors read the prospectus, they are one of the most important selling tools. Incidentally, investors should read the prospectus, and fact sheets should have clear wording pointing out that they should be read in conjunction with it.

Although essentially a selling document, fact sheets should be just that, fact based. As such, risk metrics should always be included (even if they do not look very flattering). The selection of an appropriate risk measure is a difficult task because all measures have limitations. Most measures rely on historical data and can only estimate the level of risk that was incurred in the past, not what will happen in the future. In addition, measurements will change depending on the time period over which risk is measured and the benchmark against which a fund is compared. Even so, there are a number of quantitative risk measures that should be considered for inclusion. The following are among the possibilities:

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- ◆ standard deviation;
 - ◆ alpha;
 - ◆ beta;
 - ◆ Sharpe ratio; and
 - ◆ information ratio.
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In addition to these, the fact sheet should show asset allocation and composition of portfolio, sufficient to give the investor an idea of the level of diversification. For example, the top 10 stocks in a portfolio and a geographic and sector breakdown is a good starting point. It should also have some detail of the fund manager or details on their fund management team. A short CV is better than simply the name of the manager.

Other useful information should be considered for inclusion, such as the portfolio turnover ratio, ie, the number of equity shares bought or sold by the fund over the review period. Another good example is the expense ratio, even though it is a function of net assets of the fund.

Debt fact sheets

Fixed income funds have a different focus from equity, and their fact sheets should reflect this. In addition to the number of holdings and the asset allocation breakdown, the fact sheet should include:

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- ◆ effective maturity;
 - ◆ effective duration; and
 - ◆ credit quality.
-

The reasons for these additional metrics are that changes in the average maturity, duration or creditworthiness impact the returns. A higher average implies that the fund manager is expecting the interest rate to fall over the period of time. A lower average maturity means that the fund manager is expecting interest rates to go up. Effective maturity is the weighted average of the maturities of the underlying bonds held by the fund. Similarly, effective duration is the measurable change in the value of a security in response to a change in interest rates. Credit quality is the rating agencies assessment of the underlying bonds.

Credit quality is important to specify. Asset allocation in debt funds is focused mainly on government securities and corporate bonds. Both of them carry varying risk, but investors are not able to assess these as well as rating agencies. Fixed income investing is generally entered into as a low-risk endeavour (unless it is distressed or high-yield debt). The various disclosures should allude to this.

Lead Management and the Importance of Monitoring Client Contact

Lead management is an important part of client acquisition. There is software available to maintain a single source for all leads. This centralisation of information is not only valuable to the firm but also promotes interaction by reminding the client relationship manager to follow up. A few steps should be done to optimise the process:

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- ◆ cleaning the data for duplicate lead approaches;
 - ◆ creating forms that capture leads from the firm's website;
 - ◆ generating reports that show conversion rates and the time required to convert a lead;
 - ◆ listing the lead channels that are the best performers when it comes to bringing in deals; and
 - ◆ maintaining a clean distinction between leads and contacts to facilitate lead conversion.
-

In addition to the above, fund managers should automate the entire lead life-cycle process, from lead generation, prioritisation and distribution to follow-up processes. They should also consider extending the lead management process to partner organisations, such as its parent or subsidiaries.

Marketing Analytics

The author strongly believes that the mining of data can help with marketing activities. It certainly helps senior management to understand the effectiveness of marketing activities and, importantly, it helps with the prediction of future probabilities and trends.

The marketing department should convert such data analytics into actionable insights. This allows them to evaluate the various distribution channels. Without this it is impossible to quantify the size of the opportunity. One approach is to classify and segment the customer base, for example by size, risk or institution.

The key to this approach is to use data mining tools and techniques to build a predictive analytical model. Alternatively, you can buy software that will do it for you. Data mining tools extract data by accessing the firm's

database and then process the data with advance algorithms to find hidden patterns and predictive information. Data and analysis as to which competitors a potential target has awarded mandates to is particularly relevant. This information allows the fund manager to predict customer behaviours and thereby anticipate their needs. This should, in theory, create more relevant, targeted pitches.

How to Undertake Systematic Brand Management

Typically, fund managers fail to underestimate the power of brand management as they manage and optimise the use of their marketing resources. Systematic brand management allows fund management firms to focus their activities and resources around strategic marketing goals.

Strong branding also improves visibility and control in any marketing process. It is a good idea therefore to build brand awareness across the industry and third-party related entities. In order to facilitate collaboration among team members and coordinate marketing activities across the enterprise, there are a number of client classifications that are used in brand management that are worth knowing:

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- ◆ untouched – the customer the fund manager has not previously reached and who has not heard about the firm;
 - ◆ unmoved – this customer has heard of the fund manager, its marketing has reached them, but they are not ready to award a mandate;
 - ◆ prospect – this customer is considering buying, maybe from the fund manager, or maybe from a competitor; the firm is in the running, but has not closed the sale;
 - ◆ customer – this customer has made a mandate award to the fund manager;
 - ◆ client – this is a happy customer who has returned to award more mandates to the fund manager, and is now a core client; and
 - ◆ advocate – this customer not only awards mandates to the fund manager, but also recommends it to others or allows the fund manager to give its name as a reference client.
-

Although these classifications sound simplistic, they do work. The idea is to systematically move prospects from one level to the next using a brand campaign. Campaigns generally revolve around either new products or those that are in the top deciles or quartile of investment performance. Such campaigns require management and efficient execution in order to optimise the sales outcome.

The first decision in any brand campaign is whether to promote the portfolio manager involved with the fund (the star manager approach) or to promote the investment theme or concept.

The second decision is how to make any marketing contact relevant and personalised, even if using mass media. Marketing activities through any channel – such as direct mail, e-mail, telephone or the Internet – needs to be customised. During this process, it is necessary to build on previous interactions to make the follow-up more relevant and personalised. In the digitalised world, it is also important to leverage online marketing. There should be a separate plan, to develop and execute the Internet campaign.

Building Reputation

Closely allied to brand management is reputation building. This means having a good public relations strategy, but also a set of internal and external guidelines on how to deal with day-to-day news flow. This should be based on the following building blocks:

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- ◆ emotional appeal;
 - ◆ vision/leadership;
 - ◆ socially responsible investing;
 - ◆ workplace environment;
 - ◆ fund performance; and
 - ◆ funds/mandates.
-

Of course, the author appreciates it is difficult to measure such metrics. Reputation, for example, comes from recognition, and benefits can be seen in employee recruitment and retention. Trust is by far the most important measure here, to develop a clearer understanding of what internal customers want and how best to give it to them, while at the same time managing customer expectations and thus deepening the relationship.

Even among high-integrity managers, some strategies might be unpopular and subject to characterisation in the press that may negatively impact a fund manager's reputation. These should be discussed and managed.

A common mistake of many managers on the soft skills side is to keep up contact in the good times and not the bad. The clients or plan sponsors are not as concerned about the good times as they are about the bad. It is in periods of underperformance that good communication is crucial. It is natural to prefer giving good news to giving bad news, but this is not what your client needs. Poor investment performance has to be addressed both from a front office perspective and from a communication perspective.

Addressing Poor Performance From a Communications Perspective

Clearly no one wants poor performance, and all fund managers offer to achieve good performance. That said, it is a statistical certainty that there will be periods of underperformance. In order to address these, it is necessary to prepare the client for the scenarios under which the portfolio will underperform.

It is important during such periods to point out that the firm has qualified staff that can reasonably detect true investment opportunities, and that underperformance is a function of timing. The way that this is communicated depends on the particular investment strategy. It is useful to evaluate the long-term strategies and execution.

The author would also suggest that in order to address underperformance, it is necessary to manage the communications through the use of attribution. In this way, it is possible to gain insights into performance segments with data visualisation.

Employing Third-Party Marketers

As with any industry, third-party marketing widens the reach of the firm but brings with it its own unique set of business issues. Firms typically have three or more experienced senior-level salespeople with diverse connec-

tions, often having worked for larger firms in their past.

When employing such a marketing strategy, firms must accept that they are generally interacting with small outfits. The Third Party Marketers Association recommends that the interface between them takes this into account, and:

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- ◆ is specific about the key business such as term, compensation, roles, responsibilities and the firm's personalised marketing work plan;
 - ◆ provides agreements that clearly outline roles and responsibilities for both the manager and third parties; it is important that the client understands that each play a key role in the relationship; and
 - ◆ that agreements take into account the regulatory limitations, restrictions or other parameters for each party involved.
-

In implementing such arrangements fund managers should also ensure that the firms with which they interact provide services in their areas of competence. This includes ensuring they are honest and forthright about their professional experience, qualifications and/or education.

A survey of third-party marketers by the Third Party Marketers Association reported that the majority charge between 11% and 20% for management and performance fees. More than one fifth of those surveyed had contract terms with clients of longer than five years, with a further quarter having terms of between three and five years.

Drafting Investment Mandates

Investment mandates and fund prospectuses are at the core of the fund management business. Once a mandate has been awarded, an investment mandate and a management agreement have to be signed. These documents set out the agreed constraints on investment behaviour in legal terms.

Each investment management agreement should be accompanied by a set of investment guidelines. Clearly, the guidelines will change according to the specific investment mandate, but there are some areas to consider when drafting them. For instance, they must state:

-
- ◆ acceptable market capitalisation of equities;
 - ◆ acceptable credit quality of fixed income investments and the range of credit quality;
 - ◆ any limitations on the purchase of specific equities;
 - ◆ individual security allocation limits;
 - ◆ restrictions on investments in pooled investment vehicles;
 - ◆ sector/country allocation limits;
 - ◆ the target portfolio duration and the range of acceptable variation;
 - ◆ the target tracking error and the range of acceptable variation;
 - ◆ the types of securities, currencies and other assets that may be purchased;
 - ◆ whether currency hedging is permitted, including through the use of forwards;
 - ◆ whether derivatives are permitted and for what purposes;
 - ◆ whether leverage is permitted and to what extent;
 - ◆ whether options, futures or commodities are permitted investments;

- ◆ whether purchases of foreign securities are permitted; and
- ◆ whether short sales are permitted.

In addition to the above constraints and permissions, the agreement may limit the fund manager's ability to make investments that expose, or potentially expose, the client to loss or claims. This is standard practice, as the award of a mandate does not mean the fund manager can engage in transactions between the plan and other accounts for which it is not an advisor.

The documentation should identify any specific restrictions not contemplated by the fund manager's policies, such as soft dollars. The agreement should likewise outline the roles and responsibilities to be assumed by the fund manager. It should also include confidentiality and non-disclosure provisions.

Although the fund manager does not want to think about the end of the contract, it is also a good idea to have a termination clause based on a specified number of days' notice. Exactly how many days will be required will depend on the nature of the account and the mandate.

Adding Constraints to an Investment Mandate

The investment agreement is the place to add any constraints. These are restrictions on the investment portfolio, which are typically added after the award of a segregated mandate. As a result, they are usually agreed with the client, and often cover:

- ◆ trading constraints.
- ◆ ethical constraints; and
- ◆ risk constraints.

Constraints are traditionally seen as something that impairs performance. In this respect, the author would advise that it is important to understand that the more constraints imposed on a portfolio reduces its return per unit risk (information ratio). A good way to avoid this happening is to run a back test on the portfolio based on the proposed constraints.

Constraints should be counterbalanced by the taking of active risk in other parts of an investment portfolio. This can be done by simply scaling up the active positions. Typically, fund managers use optimisation tools to overcome constraints. As such, the resulting optimally constrained portfolio reins in risk in accordance with the investment guidelines.

How to Ensure Efficient Client On-Boarding

Winning the client is on the end of the marketing process. Another key element is the client on-boarding process. This is where the contract language and desires of the newly won client are translated into the world of the fund manager, where the client becomes a reality in the custody accounts and front-office screens – in other words, another client-acquisition opportunity.

The on-boarding process is the first professional interface the client has with the rest of the firm. Do not forget, its marketing professionals communicate in a different language from the front and back office. Likewise, legal

contracts are worded in more complicated and precise terms. The solution for this is to ensure that the operations team monitor the on-boarding process manually. The keys to success for this include:

-
- ◆ executing the on-boarding steps in parallel throughout the firm;
 - ◆ identifying system-wide data entry and consolidating the new client into the firm's interface;
 - ◆ managing the various steps and manual hand-offs;
 - ◆ avoiding unclear lines of responsibility (where two or more staff have similar or crossed-over responsibilities);
 - ◆ reviewing how operational information from the back office is made available to managers in the front office; and
 - ◆ maintaining an implementation schedule and providing management and the client with ongoing progress reporting.
-

These steps are often handled by the client relationship manager, who often takes over from the marketing team. The first element of their role is to ensure the successful completion of these critical task items under strict deadlines. That involves coordinating with both all external parties and internal departments.

The on-boarding process includes both the front and back office, as well as substantial input from the middle office. The middle office is the interface with risk controls and compliance rules, and also for the monitoring and delegation of responsibilities. Good internal procedures help with the process.

Internal Procedures

Internal procedures make for an orderly on-boarding process. The award of a mandate is often made by a small sub-sect of the client, making it important that the client relationship manager facilitates meetings at all levels of the client's organisation as well, in order to progress the implementation project timeline. This includes:

-
- ◆ assisting in training new clients in systems applications;
 - ◆ creating procedures and solutions to ensure delivery of the highest quality service that is tailored to match each client's structural and operational needs; and
 - ◆ acting as a liaison between the client, internal departments and other third-party vendors to attain and disseminate information and coordinate efforts during the on-boarding process.
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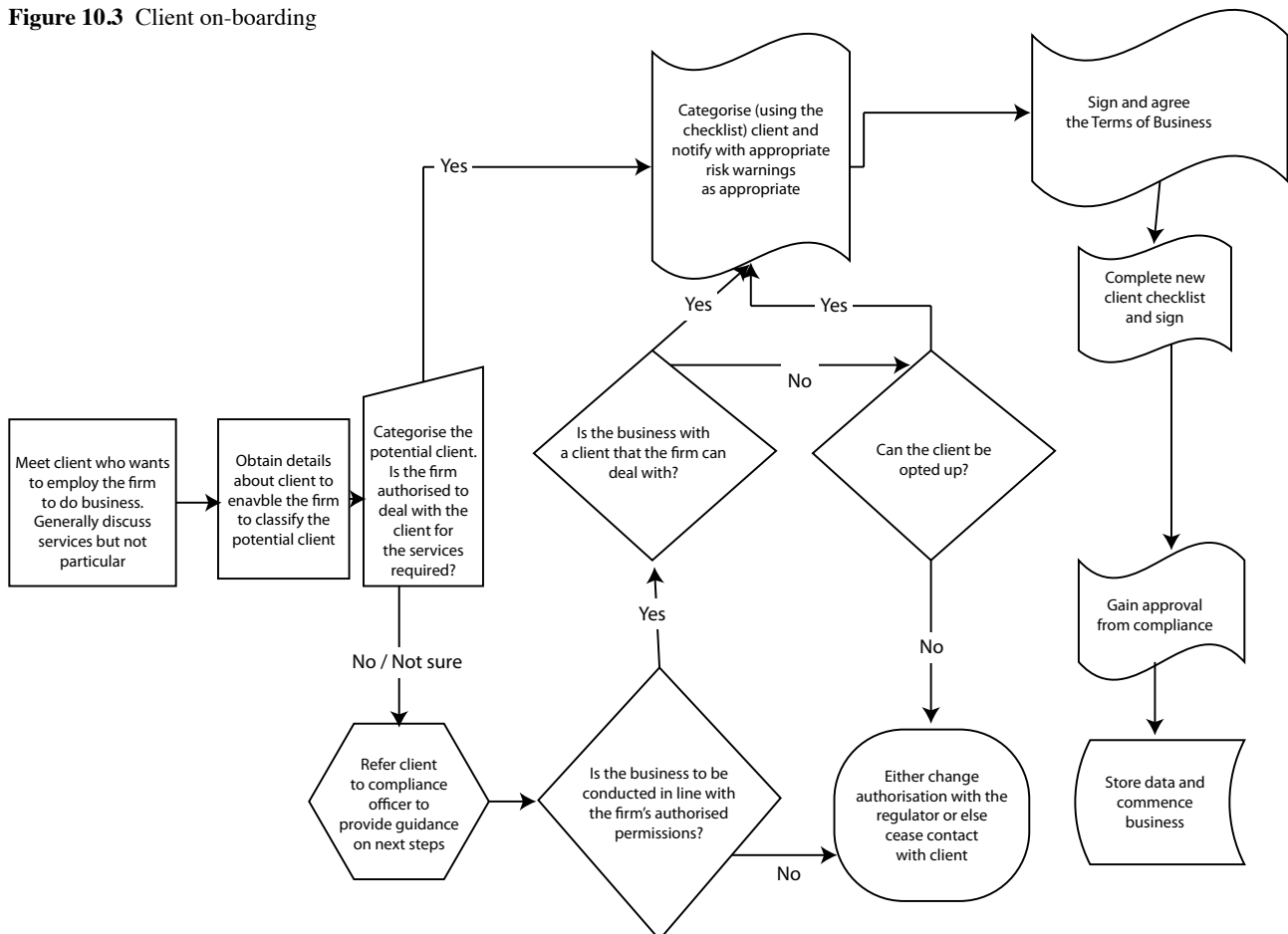
The whole client on-boarding process is a good test of how client-centric a fund manager really is. It is a good idea for senior management and the sales team to have a briefing to help identify the various issues, such as requirements for training, guidance and staff mentoring.

The on-boarding process can add to the firm's reputation, as it highlights to the client the firm's processes and procedures in respect of efficiency, risk controls and compliance. Figure 10.3 presents a typical on-boarding flowchart.

A relatively new part of the client on-boarding process is the appointment

of transition managers. This is because a client will often not want to suffer the market impact of switching mandates. Performing transaction analysis and implementing an automated processing of order flow uses technology to cover the trading of the portfolio, as well as the switch over and its handling.

Figure 10.3 Client on-boarding



Conclusion

This chapter has shown that client acquisition is one of the most important things a fund manager does to ensure its success. Without clients there are no fees, and without fees the best processes or systems are merely add-ons.

This chapter has also shown that there are a number of fairly standard communication issues that have undertaken, including answering Requests For Proposals and writing fact sheets. It has shown how analytics, brand management and even the Internet can all be used to enhance the sales and marketing drive. In all this, the author has argued that the firm should remain client-centric.

After the communication of the message and the client comes on board, the firm should ensure the process is as smooth as possible. This includes drafting and signing a robust and comprehensive investment management agreement. After client acquisition, the firm must hold onto those clients. The next chapter will explore what can be done to retain them.

Panel 10.1 Legal Text For the Appointment of a Fund Manager**Terms of agreement**

The Fund hereby appoints the Fund Manager to perform the investment services and the administrative services described, and the Fund Manager accepts such appointment and agrees to perform the Services on the terms and subject to the conditions set forth in this Agreement. The Fund Manager shall manage the Fund using its best commercial practices lawfully, ethically and in compliance with the Investment Policy Guidelines, this Agreement and the other Fund Documents.

Nothing in this Agreement shall be deemed to relieve or deprive the Board of its authority and responsibility for control of the conduct and affairs of the Fund. The Fund Manager shall be an independent contractor of the Fund and, except as provided herein, shall have no authority to act for or to bind the Fund in any respect. Certain employees of the Fund Manager will be appointed by the Board as officers of the Fund, and shall have authority to act for and bind the Fund to the extent such authority is expressly granted to such officer by the Board (and not withdrawn) in accordance with the Fund Operating Agreement.

The Fund Manager shall, subject to the supervision of the Board, assist the Fund in implementing its investment programme in accordance with the Investment Policy Guidelines and the other Fund Documents, and, in connection therewith, shall do the following:

- (a) Complete any steps necessary for the Fund to commence business operations in the period following its formation, as approved by the Fund.
- (b) Identify and analyse investment opportunities for the Fund consistent with the Investment Policy Guidelines, and make investment recommendations to the Board.
- (c) Perform financial analysis and due diligence reviews of potential investments.
- (d) Structure, negotiate and execute investment transactions on behalf of the Fund in accordance with the Investment Policy Guidelines and the other Fund Documents.
- (e) Review, actively monitor and manage the Fund's overall investment portfolio and carry out a Monitoring Plan.

11

Client Retention

“Money is to be respected; one of the worst things you can do is handle another person’s money without respect for how hard it was to earn.”

T. Boone Pickens

Having done the hard work to attract assets, fund managers have to work equally hard to hold onto them. Respect for their clients and their investment objectives are key to doing this. This should be supported through creating valuable relationships with clients – a simple concept, but one that is easy to overlook.

Every point of contact with the client is critical in maintaining the relationship. Attention to needs is an important aspect of every interaction. Indeed, there are five rules that must be observed during such client contact.

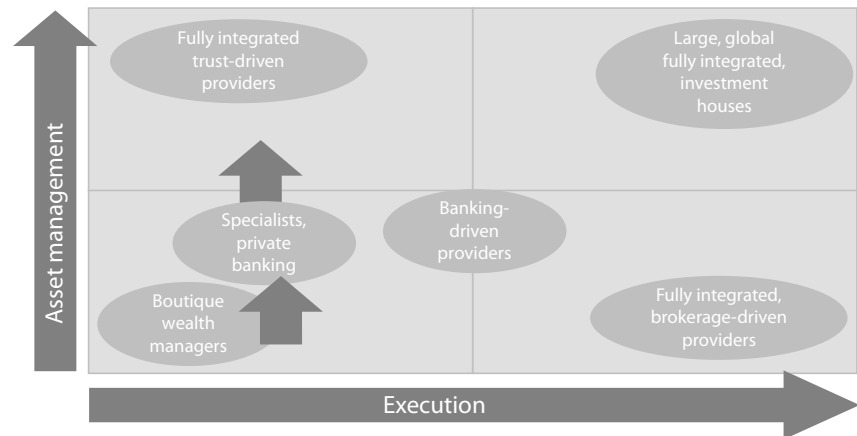
-
- ◆ Rule 1 – clear and concise communication;
 - ◆ Rule 2 – make the client feel inclusive;
 - ◆ Rule 3 – deliver or explain performance;
 - ◆ Rule 4 – do not be afraid to admit a mistake; and
 - ◆ Rule 5 – constant contact.
-

The last of these rules, constant contact, differs according to the type of interaction fund managers have with the client. The more execution orientated, the more factors such as price and efficiency come into play. At the boutique end of the spectrum, as can be seen in Figure 11.1, client interface is at its highest.

As in customer acquisition, data mining is important in client retention. That said, there should be a lot of reading between the lines on any feedback. Once a client becomes a client, they tend to say one thing to the relationship manager but something quite different when it comes to what they really think.

Figure 11.1 Client involvement in investment decision

Source: Cap Gemini



It should always be remembered that it is cheaper to keep a client than to acquire one. As such, the client retention strategy should be integrated into the day-to-day running of the firm. When budget cuts are implemented, client-support activity is usually scaled back dramatically. This should be avoided. Retention of customer relationship managers – the core of any fund management firm – should be as much a focus for the management of the firm as retention of the portfolio managers. Communication with clients is the lifeblood of the business.

Communicating With Clients

Spending time regularly communicating with existing clients is crucial. This should be undertaken in addition to any monthly or quarterly review meetings. Interestingly, one regulator, the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin, Germany's Federal Institute for Financial Services Supervision), actually requires that fund managers have a good customer relationship system. These can either be purchased or developed internally.

In order to be effective in such communication, the relationship manager should ask the client what they want, what they need and what they think of the markets. If the client has questions and the relationship manager cannot answer them, someone else should be delegated to assist the client with them. The relationship manager should, however, retain ownership and drive the issue through the fund management organisation to obtain an answer.

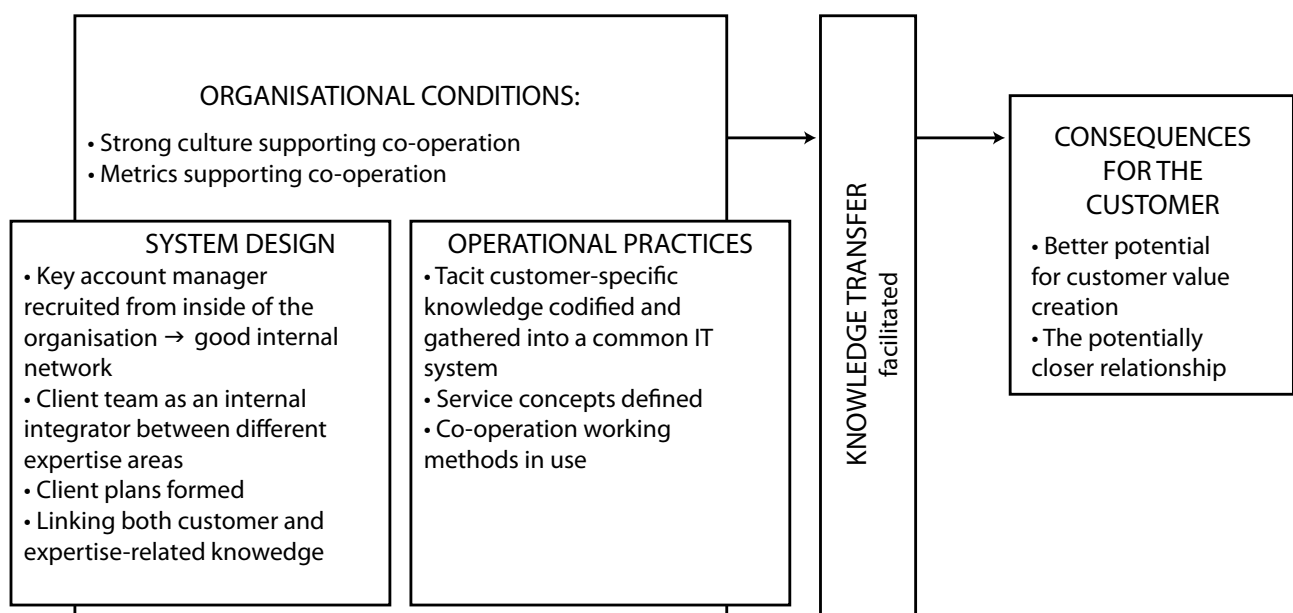
The whole theory behind good communication boils down to giving the impression that the firm is accessible, makes the client feel understood and that the client's investment needs are being met. Having processes and structures that directly address their return goals can turn clients into loyal relationships. When the relationship between a fund manager and a customer builds into one of trust and value, the fund manager can build customer loyalty. Key points to focus on in this process include:

- ◆ the ability to rigidly adhere to investment policies;
- ◆ the ability to outperform;
- ◆ the ability to avoid material, long-term underperformance;
- ◆ the ability to avoid losses;
- ◆ the ability to provide quality support services; and
- ◆ the ability to design effective investment products.

As was explained in the previous chapter, all fund managers will have a period of poor performance. This is why these key points differentiate between communication on outperformance and underperformance. They are different skills. If communication dries up during periods of underperformance, the risk of losing the client increases.

Effective knowledge transfer is the cornerstone of client retention. In the fund management industry, knowledge sharing refers to the sharing of information and attribution on investment performance and the investment outlook. The idea is for the key account managers to offer insights when facilitating this process. Figure 11.2 shows how this adds to the relationship building process.

Figure 11.2 Key account managers and knowledge transfer



Key account managers that prove themselves good at both client service and retention are often highly successful. Indeed, this has been shown to be the case in both the retail and institutional settings, even when investment performance is poor. For example, research by McKinsey (Kshirsagar and Ramji 2006) showed that firms with an above-average spend in client service experienced outflows some four percentage points lower than those firms with a below-average spend. Those who regularly communicate with consultants can also reduce client outflows.

Communicating With Consultants

As has been explained, pension funds and other institutional investors use investment consultants for strategic advice on principal drivers of returns, such as fund selection and asset allocation. Because of this, communication with them has to be done in an optimal way. After all, investment consultants have become the gatekeepers for the industry, advising on 41% of all

pension assets and the majority of large pension plans over US\$500 million.

The various international consulting firms used by larger investors include Watson Wyatt, Russell and Mercer. Like fund managers, they have their own investment process and protocols that should be observed. The key points that need to be communicated as part of these protocols are:

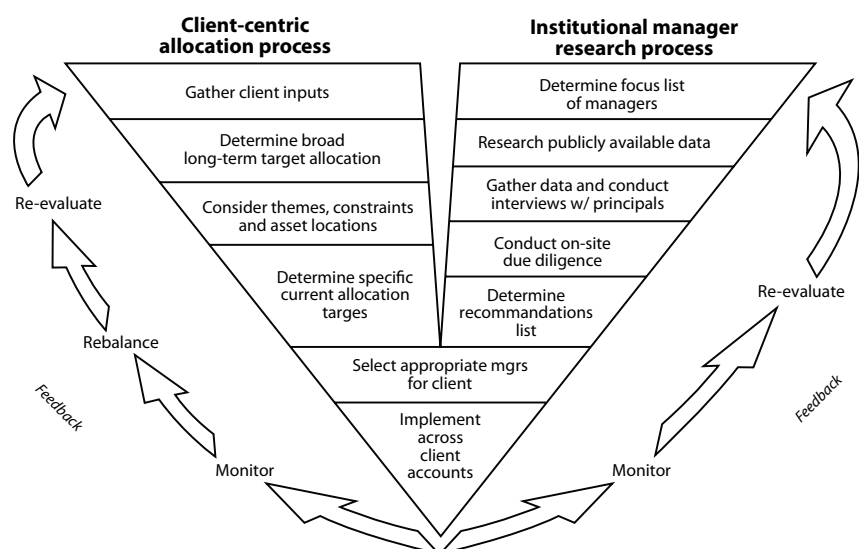
- ◆ track record;
- ◆ process;
- ◆ portfolio managers;
- ◆ outperformance of the fund;
- ◆ volatility of the fund versus benchmark;
- ◆ volatility of the investor’s portfolio that is not in the manager’s fund;
- ◆ correlation of the fund with the rest of the investor’s portfolio;
- ◆ correlation of the benchmark with the rest of the portfolio;
- ◆ understanding only a fraction of the investor’s portfolio is managed by the fund;
- ◆ client-supporting strategy; and
- ◆ service and back up.

The protocols should be observed and systems set up to deliver the various fund’s composite data on a regular basis. Likewise, a visitation schedule and updating schedule should be made and stuck to. In communicating the above points, it is important to prioritise. Over three-quarters of consultants want fund managers to demonstrate a consistent investment performance track record without surprises. As a result, performance stated in comparison to appropriate benchmarks is the highest priority.

Obviously, the nature of the interaction depends on whether the consultant has an allocation process or a research process, The distinction between these two approaches is shown in Figure 11.3. Essentially, the former requires more quantitative input, the latter more qualitative.

Figure 11.3 The two investment consultant models

Source: Samoset Capital



The dialogue between the fund manager and the consultant should be a continuous review of investment policy, portfolio mix and investment strategy. Consultants have to maintain a broad database of fund managers, including their philosophies, styles, fee schedules, portfolio characteristics, firm characteristics, performance and client base. It is not wasting their time talking about such things, it is what they do every day.

This dialogue facilitates the information assimilation process. Interestingly, the information shared with the consultant is similar in nature to that shared with other professional distribution channels, such as open architecture platforms.

Communicating With Open Architecture Platforms

Open architecture and fund supermarkets are multi-manager platforms that allow investors access to unit trusts offered by third-party fund managers, with the convenience of a one-stop-shop. The idea behind open architecture is to provide strategic advice, manager evaluation and centralised performance reporting (Curtis 2006). The concept was started by institutions transforming themselves into asset gatherers rather than fund managers, which shifted the responsibility for investment performance to third-party asset management firms. When funds' performance flagged, the open platform can "fire" the fund managers and replace them with others.

Communicating with such platforms can be rewarding but also expensive relative to the assets that might be gathered. The overhead cost of client acquisition and retention, therefore, should be met from the fees of the lowest levels of business expected. This cost should increase slower than business volumes.

The support for products on open platforms tends to focus on data requests. As a result, it requires multiple databases. Typically, the middle office is tasked with providing this.

Communicating with open architecture platforms is much the same as "general brand management". In other words, it is a communication effort focused at the public. In this respect, investors are predominantly concerned with quality, which means not just good performance but a brand they recognise and trust.

Going Beyond the "Know Your Client" Requirement

"Know your client" (KYC) is a term commonly used for the client identification process. It is also an important client retention imperative. All fund managers should strive not just to mechanically undertake form-filling exercises, but go beyond that and really get to know the client.

The regulatory KYC process requires a customer identification programme. This effectively means the fund manager has to perform due diligence checks before doing business with a person or entity. This entails verification of identity and address, providing information of financial status, occupation and such other demographic information. Obviously, this is only a small part of KYC, and other information can and should be gathered as part of this mandatory process.

As part of the formal process, if checks reveal that a potential client is a politically exposed person (PEP), further work must be done in order to ensure that the person's source of wealth is transparent. The KYC process

is also useful for ensuring that clients do not pose a reputational or financial risk to the firm. Beyond customer identification checks, the ongoing monitoring of transfers and financial transactions against a range of risk variables forms an integral part of the KYC compliance mandate.

Becoming an expert in the client's business is a good way to get to know the client. To do this, relationship managers should read client's industry reports and attend their events. The interest will be apparent to the client and the resultant insights will be more valuable. Table 11.1 shows how such information can be gathered.

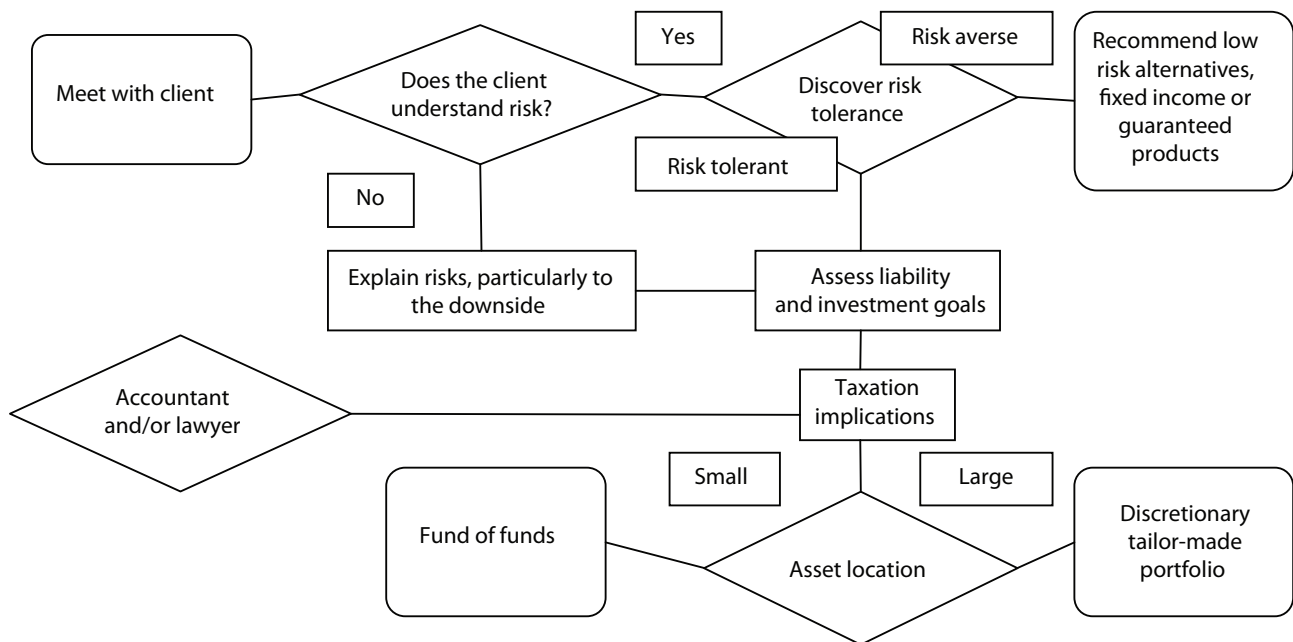
Table 11.1 Going beyond 'know your client'

Methods to better understand clients	Advantages
Reviewing client's industry investment publications	Reviewing the client's industry publications provides insights
Assessing evaluations and effectiveness reviews	Assessing evaluation data may provide the perspective of external evaluators, peers and stakeholders on what they think
Analysing data	Analysing data offers a unique opportunity to identify and evaluate clients
Conduct focus groups	Conducting meetings with clients provides a mechanism to gain the perspective of customers and stakeholders on their views
Brainstorming	Brainstorming allows people an important opportunity to freely express their opinions and generate new ideas; it provides a systematic approach for generating new ideas that can be more fully tested and evaluated by other research methods
Benchmarking	Benchmarking with peers and clients provides an opportunity to identify the best performers and help achieve performance excellence

It makes sense to create a KYC profile for each client. In the ideal situation, this is done immediately upon starting a new business relationship. In this respect, clients should be classified into defined risk categories. The more data that can be garnered the better. Regulatory requirements should really just be considered as a minimum starting point. For institutions, for example, a list of competitor funds and allocation process is also a good idea.

Clearly, such KYC profiles will be different for private as opposed to institutional clients. Chapter 3 of this report gives a good idea of how these differences manifest themselves. An initial meeting with a private client, and the assessment of their risk, is shown in Figure 11.4.

Figure 11.4 Investment meeting with private client



Understanding Core-Satellite Asset Allocation and Its Implications for Client Retention

A core-satellite approach is one way that a fund manager’s client addresses asset allocation between its managers. It illustrates what risk the client is willing to take and is valuable in understanding the client. Understanding the client approach can help win and retain clients.

The core-satellite approach consists of dividing the portfolios they outsource to fund managers into a core component, which is passively managed, and an active component. The latter is made up of one or several satellites of active managers, who are allowed to have a higher level of tracking error. It is beholden on the fund manager to understand where their own process fits into a core-satellite approach. Pitching its funds into the right segment increases the chance that they will be adopted.

There are two implications of this approach. If the manager is part of the core, they can expect a longer tenure than if part of the satellite. Higher fees and specialist approaches are better suited to satellites, as this is generally the alpha-generating part.

Reporting is also impacted by which part of the allocation the manager is in. The core part of the portfolio has a greater focus on controlling manager risk. The role of active satellites is to provide investment diversification and to generate outperformance with regard to the index. Clearly, there is not much point pitching a product that does not exhibit that characteristic. In this respect, the information ratio is the most useful measure.

Understand and Surpassing Expectations – The Use of the Information Ratio

Effective client retention strategies require a sound understanding of a client’s needs and challenges, and a thoughtful approach to surpassing expectations. Every client and client organisation is different, but most expect performance goals to be broadly met (in relative rather than absolute terms). In this respect, the most important thing to understand is the client’s risk

tolerance, and it is a good idea to give clear and concise guidance on the nature of returns during:

-
- ◆ market cycles;
 - ◆ periods of style led performance;
 - ◆ draw-downs on a fund; and
 - ◆ negative scenarios.
-

In an institutional context, the fund manager should remember that it is risk-adjusted outperformance that the client wants. One way to manage expectations, in this respect, is through the information ratio. This is the ratio of the alpha component of total returns to the standard deviation of these excess alpha returns. In other words, it deducts the effect of market movements from returns and adjusts for the risk taken. This gives a single number that neatly summarises the element of performance that can be attributed to skill, the alpha component. In financial terms, it is the residual after taking out the risk-free return and the beta components from the total returns.

The information ratio, which was explained in Chapter 2, builds on modern portfolio theory. Typically, managers communicate information ratios of between 0.75 and 1.00. It would be counterproductive to suggest higher. Suggesting lower would imply that the client is not getting what they are paying for. The average information ratio achieved by fund managers is only just positive and, despite marketing hype, tends not to exceed 0.5. Less than 3% of management styles achieved an information ratio in excess of 1.

The higher the information ratio, the better the manager. The ratio is particularly useful when comparing a group of funds with similar management styles and asset allocation policies. If two funds have similar alphas, the higher information ratio identifies the manager who has been more skilful in selecting individual shares that deviated from the index. The lower information ratio, in this example, denotes gains that have more to do with market movements than active management.

Handling Tracking Error and Investment Constraints

To control the risk taken by their fund managers, investors typically impose limits on allowable deviations from performance targets. The most common of these is tracking error. In effect, this is a restriction on the difference between a portfolio's return and the index it is intended to mimic or surpass. If wanting to retain a client, it is a good idea to observe these limits.

Tracking error is also known as active risk. It is the simple arithmetic difference between the benchmark's cumulative returns and the portfolio's returns. For specialist mandates, performance targets tend to be specified in terms of information ratios that offer a relative return per unit of tracking error. Typically, relatively tight bounds on permissible tracking error are set.

One thing to be careful of is benchmark choice. Tracking error and active risk should be key points of discussion during client reviews.

Preparing Reviews and Client Visits

As has been explained, communication and contact with the client is crucial. Regular performance reviews provide this opportunity, and should be used

to communicate more than just the raw numbers. Client visits should be both regular and structured. The frequency of meetings depends on the size of the client and the seniority of the person attending. A standard approach to such meetings should include:

- ◆ reminding the client of the key investment philosophy;
- ◆ updating the client on any organisational changes since the last meeting;
- ◆ presenting the performance in line with Global Investment Performance Standards;
- ◆ attributing the performance to key decisions;
- ◆ providing an outlook and forecast for the future; and
- ◆ commenting on portfolio changes.

One of the most important results from such meetings is feedback. This avoids the need for crisis management when things do not go according to plan.

Crisis Management When Things Go Wrong

Client retention is most difficult when things go wrong. Crisis management means having a plan in place for such eventualities. In other words, identifying who will do what, and having practiced the plan for most conceivable events.¹ One of the most important parts of your crisis management plan has to be the crisis communications plan. A crisis, incidentally, can be anything from losing a star portfolio manager to a terrorist attack.

Crisis management involves a number of elements:

- ◆ identification;
- ◆ assessment of magnitude;
- ◆ event tracking;
- ◆ managing human considerations;
- ◆ damage assessment;
- ◆ assessment of resources and options;
- ◆ development of contingencies;
- ◆ managing communications;
- ◆ co-ordination with external bodies;
- ◆ controlling information;
- ◆ controlling expectations;
- ◆ managing legal requirements;
- ◆ limiting the damage;
- ◆ selecting an individual and team to deal with the crisis; and
- ◆ resolving the crisis.

In order to affect the above points, a fund manager should form a crisis team and designate only one person to speak about the crisis to the outside world. The important thing is to act to prevent or counter the spread of negative information. Make use of the media to provide a counter argument. Do not manipulate or distort the information, as this may backfire. As with most things, planning is worth the effort.

Managing Client Functions

Client entertainment is a great way to retain and keep in touch with clients, as well as having some fun at the same time. The management process involves conceptualising, developing, planning, implementing, marketing and sponsoring, so it is vital to take a strategic approach to such entertainment.

It is also necessary to have a discussion about which events worked in the past and which did not. Once this information has been collected, the following steps should be taken to formulate future events:

-
- ◆ creating the vision;
 - ◆ managing perception;
 - ◆ delivering cohesive, consistent messages;
 - ◆ relationship development;
 - ◆ story creation and pitching;
 - ◆ press conferences;
 - ◆ photo opportunities;
 - ◆ online and printed materials;
 - ◆ advertising strategies;
 - ◆ promotional campaigns;
 - ◆ connecting clients with like-minded partners; and
 - ◆ creating sponsorship relationships.
-

Encouraging ownership of the event is important, as it encourages people to invite the “right” clients to events. The event plan should include a detailed explanation of the return on investment each event will deliver. This is calculated by working out the cost to bring a client to an event, and the value of the business the client brings to the fund manager.

Finally, it is a good idea to avoid a situation where a client is invited by competing fund managers to the same event on the same day, as this can result in one event cannibalising the guest list of the other.

How to Treat the Competition

Fund managers should always treat competitors with respect. In a people business, a competitor’s staff could one day be its staff. Nothing bad should be said about a competitor, and in order to build trust with a client even acknowledge where a competitor has superior skills and capabilities.

However, there are a number of questions that fund managers should ask about their competitors:

-
- ◆ how do competitors interact with clients?
 - ◆ how do their advertisements compare?
 - ◆ how do their marketing materials compare?
 - ◆ how good are the competitors’ marketing professionals?
 - ◆ how professional are their presentations?
 - ◆ why do customers leave them?
 - ◆ what marketing materials do they give to their prospects?
-

All these points boil down to “knowing your enemy”. It is important to know who your major competitors are and be honest when asked who they are by the client. Finally, if you cannot beat them – buy them!

Buying a Fund Management Company

The biggest client retention issues occur when a fund manager has been acquired. Acquisitions broaden distribution and customer bases, and broaden the range of products offered. They also result in a surplus of fund managers and divert resources towards integration.

The fund management industry continues to consolidate at a rapid pace. The key drivers of this activity are the establishment of critical mass to leverage economies of scale and capital strength.

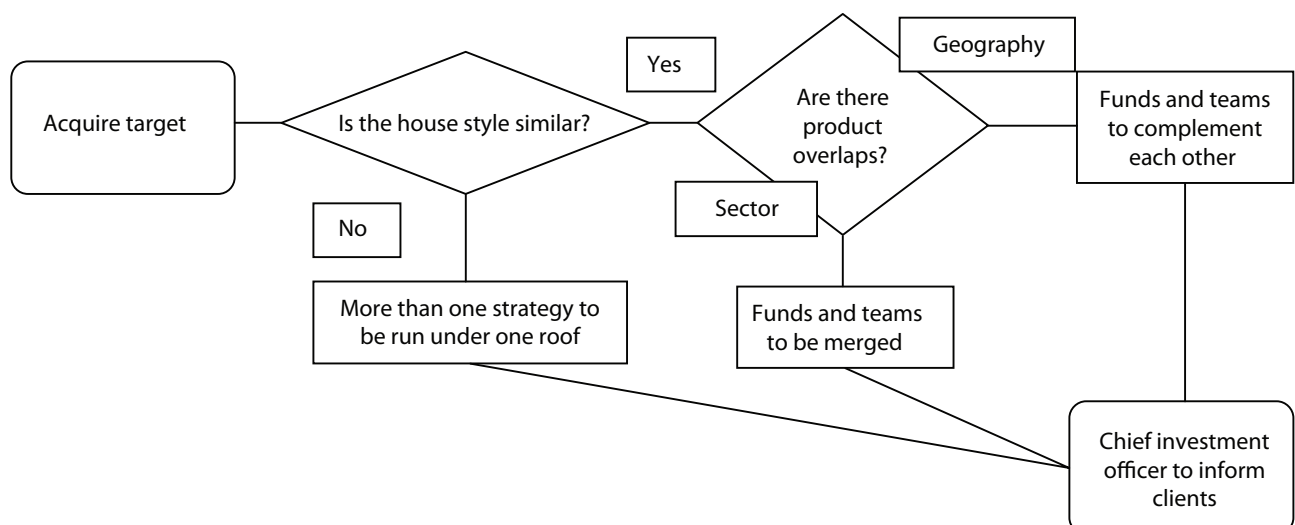
Valuation is notoriously difficult. Fund managers’ valuations reflect the performance of the equity markets overall, which influence trends in the companies’ assets under management (AUM), revenue and earnings. They are also influenced by the mix of active and passive, equity and fixed income, and running and performance fees. Publicly derived valuations differ dramatically but, based on the percentage of total capital/AUM, have a range as follows:

◆ traditional fund managers	total capital/AUM = 1.5 – 6.5%
◆ mutual fund managers	total capital/AUM = 0.7 – 4.5%
◆ alternative fund managers	total capital/AUM = 10 – 25%

Globalisation is expected to drive fund manager acquisitions as larger players continue to internationalise themselves. Likewise, traditional fund managers are now acquiring alternative fund managers, having been slow to adapt to the trend.

Figure 11.5 shows the steps that have to be taken to try to retain clients following a merger. The most successful fund management mergers are those that preserve different processes under one roof. This, however, means that there are less synergies, and therefore less of a premium can be paid.

Figure 11.5 Integrating a fund manager



Regardless of whether an acquisition of a fund manager is structured as an asset transaction, a stock transaction or a merger, due diligence is essential. Panel 11.1 presents a checklist of information and documents that fund managers should review.

Merger Checklist for Fund Managers

Due Diligence: Organisation and Good Standing

- ◆ The fund manager's articles of incorporation, and all amendments thereto.
- ◆ The fund manager's bylaws, and all amendments thereto.
- ◆ The fund manager's minute book, including all minutes and resolutions of shareholders and directors, executive committees and other governing groups.
- ◆ The fund manager's organisational chart.
- ◆ The fund manager's list of shareholders and number of shares held by each.
- ◆ Copies of agreements relating to options, voting trusts, warrants, puts, calls, subscriptions and convertible securities.
- ◆ Copies of key employment contracts, especially as they relate to bonuses and shared performance fees.
- ◆ Regulatory status, including any censures or fines.
- ◆ Where the fund manager is authorised to do business and annual reports for the last three years.
- ◆ A list of all states, provinces, or countries where the company owns or leases property, maintains employees or conducts business.
- ◆ A list of all of the company's assumed names and copies of registrations thereof.
- ◆ A review of all compliance and breaches ledgers.
- ◆ List of all subsidiaries and affiliates of the fund manager.
- ◆ A full performance overview of funds.

Due Diligence: Financial Information

- ◆ Audited financial statements, together with auditor's reports.
- ◆ The most recent unaudited statements, with comparable statements to the prior year.
- ◆ Auditor's letters and replies.
- ◆ Credit report.
- ◆ Any projections, capital budgets and strategic plans.
- ◆ Industry and competitor analysis.
- ◆ A schedule of all indebtedness and contingent liabilities.
- ◆ A schedule of inventory.
- ◆ A schedule of key employees and their responsibilities.
- ◆ A schedule of accounts receivable.
- ◆ A schedule of accounts payable.
- ◆ A description of depreciation and amortisation methods, and changes in accounting methods.
- ◆ Analysis of fixed and variable expenses.
- ◆ Analysis of gross margins.
- ◆ Fees structure.
- ◆ Client list.

Due Diligence: Physical Assets

- ◆ The fund manager's general ledger.
 - ◆ Compliance and regulatory manuals.
 - ◆ A description of the fund manager's internal control procedures.
-

- ◆ A schedule of fixed assets and the locations thereof.
 - ◆ All leases of equipment.
 - ◆ A schedule of sales and purchases of major capital equipment.
 - ◆ A schedule of the company's business locations.
 - ◆ Copies of all real estate leases, deeds, mortgages, title policies, surveys, zoning approvals, variances or use permits.
-

Due Diligence: Employees and Employee Benefits

- ◆ A list of employees, including positions, current salaries, salaries and bonuses paid during last three years, and years of service.
 - ◆ All employment, consulting, non-disclosure, non-solicitation or non-competition agreements between the company and any of its employees.
 - ◆ Resumés of key employees.
 - ◆ The fund manager's personnel handbook and a schedule of all employee benefits, holiday and sick leave policies.
 - ◆ Summary plan descriptions of qualified and non-qualified retirement plans.
 - ◆ A description of all employee problems, including alleged wrongful termination, harassment and discrimination.
 - ◆ A description of any labour disputes, requests for arbitration or grievance procedures currently pending or settled within the last three years.
 - ◆ A list and description of benefits of all employee health and welfare insurance policies or self-funded arrangements.
 - ◆ A description of worker's compensation claim history.
 - ◆ A description of unemployment insurance claims history.
 - ◆ Copies of all stock option and stock purchase plans, and a schedule of grants thereunder.
 - ◆ Due diligence – mandates and funds.
 - ◆ Copies of any investment agreements.
 - ◆ Copies of any prospectus or offering memorandum.
 - ◆ Any correspondence or documents relating to any proceedings of any regulatory agency.
-

Due Diligence: Taxes

- ◆ Federal, state, local and foreign income tax returns.
- ◆ States' sales tax returns.
- ◆ Any audit and revenue agency reports.
- ◆ Any tax settlement documents.
- ◆ Employment tax filings.

Due Diligence: Material Contracts

- ◆ Excise tax filings.
 - ◆ Any tax liens.
-

- ◆ A schedule of all subsidiary, partnership, or joint venture relationships and obligations, with copies of all related agreements.
 - ◆ Copies of all contracts between the fund manager and any officers, directors, major shareholders or affiliates.
 - ◆ All loan agreements, bank financing arrangements, line of credit or promissory notes to which the fund manager is a party.
 - ◆ All security agreements, mortgages, indentures, collateral pledges and similar agreements.
 - ◆ All guaranties to which the fund manager is a party.
 - ◆ Any instalment payment agreements.
 - ◆ Any distribution agreements, sales representative agreements, marketing and agreements.
 - ◆ Any letters of intent, contracts and closing transcripts from any mergers, acquisitions or divestitures within last five years.
 - ◆ Any options and stock purchase agreements involving interests in other companies.
 - ◆ All non-disclosure or non-competition agreements to which the company is a party.
 - ◆ A list of all insurance policies held by the fund manager, and any claims made or threatened.
 - ◆ All other material contracts.
-

Due Diligence: Open-Ended and Closed-Ended Funds

- ◆ A list of all existing funds, and funds or services under development.
 - ◆ Copies of all correspondence and reports related to any regulatory approvals or disapprovals of any company's funds or services.
 - ◆ A summary of all complaints.
 - ◆ A summary of ratings, evaluations, studies, surveys and other data regarding existing funds.
-

Due Diligence: Customer Information

- ◆ A schedule of the fund manager's largest customers in terms of assets under management.
 - ◆ Any supply or service agreements.
 - ◆ A description or copy of the company's purchasing policies.
 - ◆ A description or copy of the company's credit policy.
 - ◆ A list and explanation for any major customers lost.
 - ◆ All surveys and market research reports relevant to the company or its funds.
 - ◆ The company's current advertising programmes, marketing plans and budgets, and printed marketing materials.
 - ◆ A description of the fund manager's major competitors.
-

Due Diligence: Litigation

-
- ◆ A schedule of all pending litigation.
 - ◆ A description of any threatened litigation.
 - ◆ Copies of insurance policies that may possibly provide coverage as to pending or threatened litigation.
 - ◆ Documents relating to any injunctions, consent decrees or settlements to which the company is a party.
 - ◆ A list of unsatisfied judgements.
-

Due Diligence: Incidentals

-
- ◆ A schedule and copies of the fund manager's general liability, personal and real property, product liability, errors and omissions, key-man, directors and officers, worker's compensation and other insurance.
 - ◆ A schedule of the fund manager's insurance claims history.
 - ◆ Schedule of all law firms, accounting firms, consulting firms and similar professionals engaged by the company.
 - ◆ Copies of all articles and press releases relating to the fund manager.
-

Fostering Good Press and Media Relations

The press and media have the ability to alter individual perceptions, which can lead directly to the success or failure of a fund manager. Investors act on their own perception of the facts. Indeed, as has been pointed out, it is not performance that matters but the perception of performance! A well-prepared firm can create, change or reinforce that opinion of performance by reaching and persuading the relevant financial media.

There are three strategic choices when it comes to handling a perception or opinion challenge:

-
- ◆ create perception where there may be none;
 - ◆ change the perception, or reinforce it; and
 - ◆ change negative perception with carefully targeted, corrective language.
-

Similar to marketing, effective public relations seeks to communicate information that will:

-
- ◆ help launch new products and services;
 - ◆ reposition a product or service;
 - ◆ create or increase interest in a product, service or brand;
 - ◆ influence specific target groups;
 - ◆ defend products or services that have suffered from negative press or perception; and
 - ◆ enhance the firm's overall image.
-

The result of an effective public relations strategy is to generate additional revenue through greater awareness and information for the funds a manager offers.

Goals and Objectives When Dealing with the Media

Media strategy begins with identifying goals and understanding objectives. The fund manager has to decide what the goals and objectives behind their public relations strategy are, as well as how to measure and quantify them.

Media relations involve more than press releases. Directed information can alter investor perception. A fund manager's most important outside audiences must perceive the firm's funds and operations in a positive light. Perceptions almost always lead to behaviours that impact client retention.

Conclusion

This chapter has shown that good client retention means satisfying clients all of the time. This means not just performing well but is also about client service. Client retention is an ongoing process of activities that ensure clients are happy.

Particular care has to be taken to retain clients during periods of under-performance or mergers and acquisitions. The key to this is communication. Clients are increasingly focused on stable investment processes and investment style consistency. As a result, historical performance, although part of the evaluation process, is no longer regarded as the sole driving factor in manager evaluations, at least in the wholesale business.

The chapter ended with a discussion of the media. Perception is as important as performance, and fund managers should ensure they have an effective public relations strategy.

The next chapter will address performance reporting and valuation, both important aspects of client retention in their own right.

Notes

1. Coombs (2006) identified nine types of crises:
 - natural disasters;
 - malevolence;
 - technical breakdowns;
 - human breakdowns;
 - challenges;
 - megadamage;
 - organisational misdeeds;
 - workplace violence; and
 - rumours.

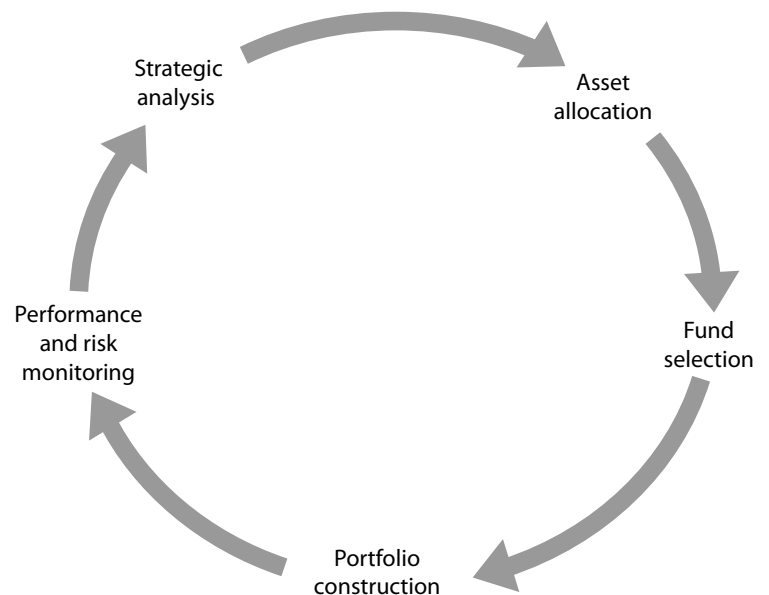
12

Performance Reporting and Valuation

“Once a procedure for measuring exposures to variations in returns of major asset classes is in place, it is possible to determine how effectively individual fund managers have performed their functions and the extent (if any) to which value has been added through active management. Finally, the effectiveness of the investor’s overall asset allocation can be compared with that of one or more benchmark asset mixes.” *William Sharpe*

William Sharpe revolutionised the performance side of the fund management industry by introducing the first risk-adjusted return measure. Reporting and valuation evolved to reflect this. Fund managers now deliver full attribution reports to clients in an accurate and timely way. Indeed, performance reporting is now integral to the iterative process that all fund managers undertake, as shown in Figure 12.1.

Figure 12.1 Integration of the performance and risk monitoring process



Performance, reporting and valuation all rely on clear measurement methodologies that have been devised from a whole range of techniques originating in modern portfolio theory. Between them these techniques establish the quantitative link that exists between portfolio risk and return, and are the basis of performance measurement and attribution. They incorporate the notion of recognising risk, which allows fund managers to produce performance indicators, risk-adjusted ratios and differential returns compared to benchmarks.

The main thing to remember while reading this chapter is that managers have a duty to provide such reporting, and investors have a fiduciary responsibility to understand that information. At a minimum, they should understand how the following metrics interact in their portfolio:

-
- ◆ liquidity;
 - ◆ size of investment;
 - ◆ capitalisation;
 - ◆ turnover;
 - ◆ leverage;
 - ◆ use of options and derivatives;
 - ◆ style; and
 - ◆ choice of benchmark.
-

All these metrics impact the return time series and, indeed, all behave differently through the market cycle. In order for the fund manager to be able to provide insights on the above metrics, a number of questions have to be addressed by the performance team before they produce their reports. These include:

-
- ◆ what is the investment horizon?
 - ◆ what is the frequency of reporting?
 - ◆ is the return to be presented in absolute or relative terms?
 - ◆ should any customised benchmarks be used?
 - ◆ are there any peer groups to be taken into account?
 - ◆ what risk-adjusted performance measures should be used?
 - ◆ is performance measured net of transaction costs?
 - ◆ is there a significant use of limits on divergence from the selected benchmark (tracking error) in the formulation of mandates?
 - ◆ what should be the trade-off between length of report and disclosure?
-

Armed with these parameters, it is then possible to slice and dice deeper into the portfolio and provide attribution. Such attribution analysis is not just an aid for clients but also an aid for portfolio managers, client relationship specialists, risk controllers, operations staff and marketing personnel. Clearly, however, attribution analysis is only as good as the benchmark selected.

Choosing Appropriate Benchmarks

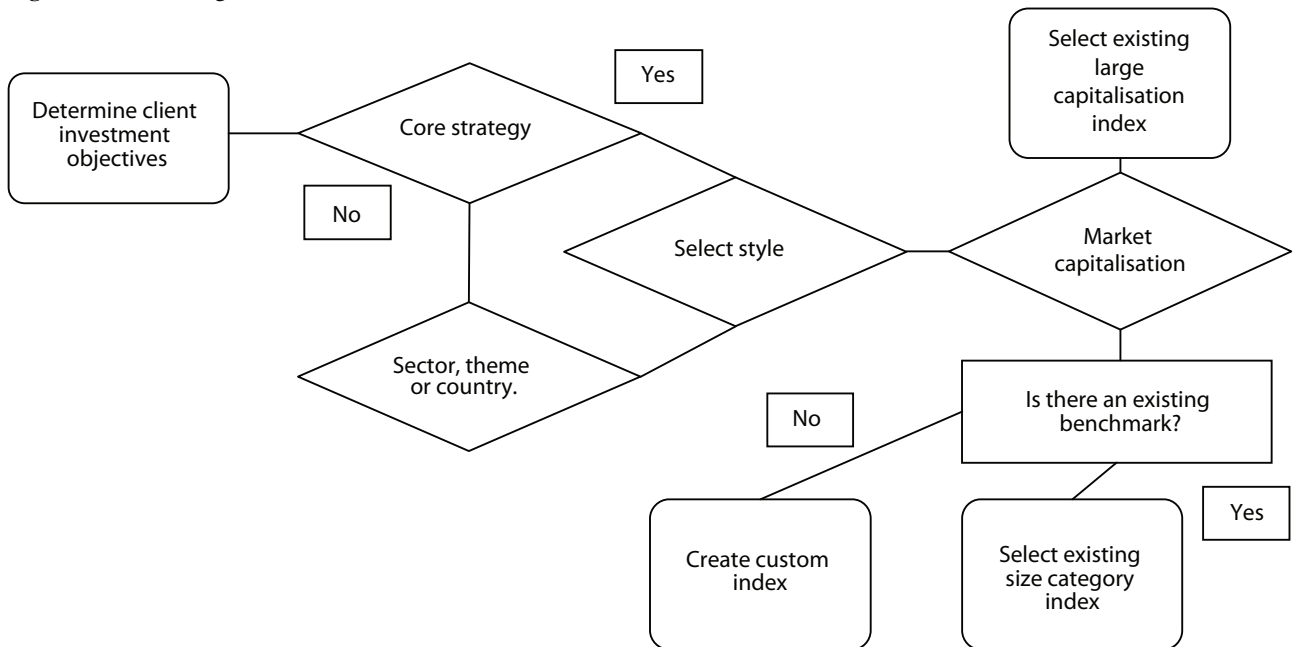
Choosing the appropriate benchmark is the first and most important step in performance reporting and attribution. In order for a benchmark to be a valid and effective tool for measuring a manager's performance, it must be:

- ◆ unambiguous;
- ◆ investable;
- ◆ measurable;
- ◆ appropriate;
- ◆ reflective of current investment opinions; and
- ◆ specified in advance.

An example of inappropriate benchmark use was when the National Association of Securities Dealers censured E*Trade, fining it US\$90,000 for violating its advertising rules. This arose when in August 1999, when E*Trade launched its tech index fund. It ran a print advertisement promoting the fund that noted that the fund’s benchmark, the Goldman Sachs Technology Index, had posted a 62.4% gain. However, it did not emphasise strongly enough that this performance bore no relation, past or present, to the fund. This shows how the choice of benchmark is so important, not just to measure against but to communicate with.

Figure 12.2 presents the steps that should be taken in selecting a benchmark. It begins with the identification of the investment objectives before looking at the selection of approach and style.

Figure 12.2 Choosing a benchmark



However, not all benchmarks are indexes. Indeed, sometimes clients choose an absolute rather than a relative benchmark. There is also an issue with any benchmark wherever clients require a minimum acceptable return. This is because any returns below the minimum acceptable return will produce unfavourable outcomes, and any returns greater will produce good outcomes¹. In any event, performance reporting requires some clearly defined benchmark with which to report against.

Most clients choose to measure relative return, the difference between

the absolute return achieved by the asset and the return achieved by the benchmark. This allows for attribution, the segmentation and explanation of the difference.

Understanding Attribution Analysis

Understanding attribution is crucial. It allows clients to see how a return was achieved and which investment decisions had the greatest impact.

Attribution is the technique used to quantify the excess return of a portfolio against its benchmark and divide it into the active decisions that represent the investment decision process. The advantage of attribution is that performance can be broken down by the key decisions made by the fund, namely:

-
- ◆ strategic allocation to broad asset classes;
 - ◆ tactical deviations from these asset classes; and
 - ◆ benchmark risk taken.
-

As with all numbers and time series, accuracy is important in terms of the inputs. When performing attribution analysis, the fund manager has to distinguish between effects and their sub-components. In this respect, an effect measures the impact of a particular investment decision as return can be broken down into several sub-components. This then provides insight into each piece of the investment decision. That said, the residuals from such a process can hide a multitude of sins; for instance, they can arise from:

-
- ◆ rounding errors;
 - ◆ balancing items;
 - ◆ trading effects; and
 - ◆ timing.
-

The performance reporting should try to clean the data so that such residuals do not affect the big picture. In that respect, it is necessary to show how much of the variability of returns is explained by its policy benchmarks. It is well known that asset allocation policy is the major determinant of fund performance. There is substantial disagreement about the exact magnitude of the contribution of asset allocation, be it at the tactical or strategic level. That said, there are models that can help.

The Brinson–Hood–Beebower Model

One of the most widely used attribution models is named after its authors, Brinson, Hood and Beebower (1995). This model decomposes the performance into sector selection, stock selection and a term for the interaction between the sector and selection effects.

The most important contribution of the Brinson–Hood–Beebower model is the attribution of a portfolio's total return to an indexed static asset allocation. The model was initially used to show that, on average, funds have not been able to add significant value above their indexed static policy returns through market timing or security selection. The various components are shown below.

$$\text{Allocation} = (w_p - w_b)r_b$$

$$\text{Selection} = (r_p - r_b)w_b$$

$$\text{Interaction} = (w_p - w_b)(r_p - r_b)$$

where w_p = weight in portfolio, w_b = weight in benchmark, r_p = return in portfolio and r_b = return in benchmark.

The model does have its flaws, however. It is really only appropriate for straightforward stock, sector and currency equity analysis. For fixed income attribution, the model is not good enough and advanced software should be used to measure the exposure to duration, the changing shapes of yield curves, credit spreads and other relevant factors. This should be built into the reporting interface.

Building a Reporting Interface

Once the firm has decided on an attribution model, it is necessary to build a reporting interface. This should be able to document, execute reporting and monitor portfolios. There are many commercially available systems on the market. It is best to find one that is Global Investment Performance Standards (GIPS) compliant, as shall be explained later in this chapter.

The reporting interface should always link what is being done for the client with the objectives. In this respect, it should allow:

- ◆ calculation of beta analytics;
- ◆ daily and monthly multi-period attributions;
- ◆ follow-the-money trade-based returns;
- ◆ functionality that covers intra-day transactions and corporate actions;
- ◆ handling of overnight cashflows;
- ◆ reporting and monitoring of risks and volatility of the portfolio;
- ◆ multi-asset equity and fixed income attribution;
- ◆ arithmetic and geometric calculation;
- ◆ exact and daily component-level, multi-currency returns for both longs and shorts;
- ◆ linking to data on prospective earnings and dividend yield of the portfolio; and
- ◆ analysis of the ongoing financial markets and investments.

All these metrics should be automatically downloaded into a report format. A good report should provide advice and input on the fund's corporate actions, proxy voting, disclosures, mergers and acquisitions, de-listings, corporate re-organisations and other notifications. The report should include portfolio performance and status against the pre-agreed benchmarks and/or success metrics. It should also include an attribution report, as well as the standard reports on equity, fixed income and assorted asset classes.

Market practice is that fund reports are usually presented in the currency of reference of the investor. These include a full listing of the portfolios, its valuation, principal, interest and dividend payments, as well as any trades or transfers executed.

As a final point, best practice now dictates that there should be reconciliation with the systems of an independent custodian that has possession and safekeeping of the assets of the underlying portfolio.

Fair Reporting

Building a reporting interface also requires that the fund manager deliver fair reporting. It is advisable to be wary of fund managers that do not, ie, those that data mine for favourable risk statistics. Fair reporting is really about answering six key questions:

-
- ◆ how has the portfolio performed?
 - ◆ how risky has the portfolio been?
 - ◆ what does the portfolio own?
 - ◆ who runs the portfolio?
 - ◆ what does the portfolio deliver?
 - ◆ what is the fee and cost level of the portfolio?
-

Although these questions appear straightforward, they can often be difficult to answer. For instance, very often there can be differences between a fund manager's system and the return generated by third-party administrators. These differences result from a range of issues. For example, different inputs, such as price sources, fee calculation and valuation procedures, all impact the output. Likewise, different return calculation methodologies and the time at which valuations are calculated also impact the reconciliation. These can all be addressed by putting thought and adequate planning into the reporting process.

Access to information and instantaneous communications are raising the bar as far as reporting goes. This all means that fair reporting has to be supplemented by accurate reporting.

Accurate Reporting

Accuracy in reporting is mission critical as far as fund management goes. Not only does the client want to know the actual value of their portfolio, but also whether the fund manager is delivering on their promises. In order to ensure accuracy, the reporting interface should:

-
- ◆ be checked by the portfolio managers;
 - ◆ distribute data efficiently and effectively;
 - ◆ identify and correct errors;
 - ◆ process large amounts of information quickly;
 - ◆ source and store good quality data; and
 - ◆ summarise and present data.
-

The less human data inputting the better, as humans make mistakes which impact accuracy. That said, source data must be known to be accurate. This includes adjustments for corporate activities and other variables.

Sometime securities can be extremely difficult to value. Even when

prices are readily available, some positions may require adjustment. For example, market quotations for portfolio securities are not readily available when the exchanges or markets on which those securities trade do not open for trading for the entire day. Accordingly, the price for those securities are based on their estimated fair value.

Accurate reporting should include portfolio performance, and clearly state the status against the pre-agreed benchmarks and/or success metrics. It should also include an attribution report as well as the standard reports on positions in asset classes, securities, bonds and transactions. All of this should be provided in a timely manner.

Timely Reporting

Although timely reporting is important, there is no rule of thumb on how often a fund manager should report to clients. The frequency of reviews depends on a number of factors, such as the complexity and volatility of the portfolio. A fixed income review, for example, does not have to be conducted as frequently as an equity review. The author would advocate that riskier and more volatile asset classes should be reviewed more frequently.

Timely reporting is normally implemented for the following reasons:

-
- ◆ legal requirement;
 - ◆ considered best practice; and
 - ◆ mechanism for supervision and monitoring.
-

Clients typically want to see reports on a quarterly basis, but to be assured that the fund is on track on a monthly basis. Occasionally, bespoke and one-off reports, such as a factor risk analysis, can be provided as a one-off.

Utilising Factor Models in Reporting

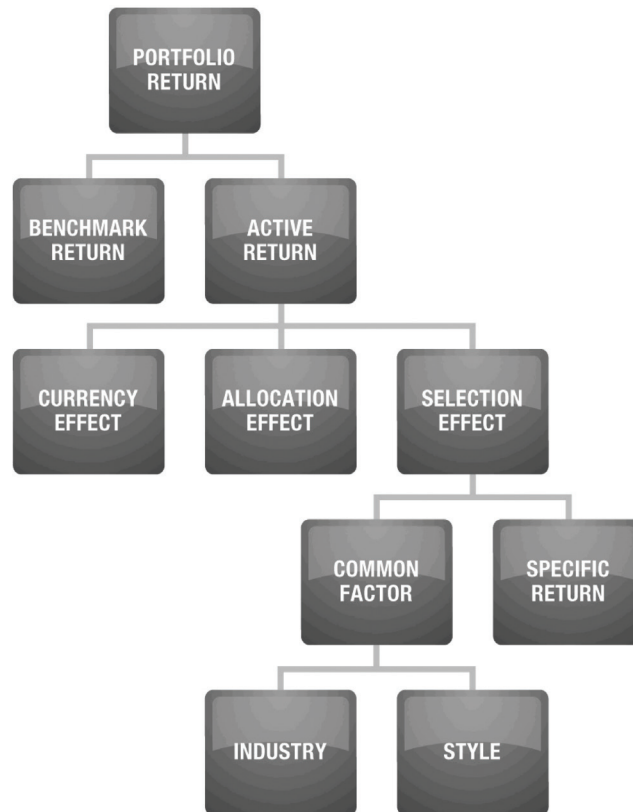
It is becoming increasingly common to utilise factor models in reporting, as well as the usual internal risk monitoring. The use of such models allows a better description of portfolio risks and an accurate evaluation of a fund manager's performance; in particular, it provides a better evaluation of portfolio alpha.

The return decomposition provided by factor models goes to a deeper level than simply attributing the active return between currency, allocation and selection effect. As Figure 12.3 shows, it further decomposes the selection effect into the factor return and specific return, and indeed takes it one step further by breaking down the factors.

A multi-factor model can therefore be used to illustrate to clients the overall risk associated with a selection effect and its relative exposure to factors. The factor analysis can include risk factors associated with the three main components: industry risk, risk from exposure to different investment themes and company-specific risk.

Care should always be taken when providing such reports. They require a basic level of knowledge and even some explanation.

Figure 12.3 Decomposition of investment returns



Value At Risk as a Tool to Understand Risk

There is now wide use of Value at Risk (VaR) as a tool for risk assessment, and this is now finding its way into fund management. In its most general form, VaR measures the potential loss in value of a portfolio over a defined period for a given confidence interval. The concept is closely related to tracking error. More precisely, VaR generalises the likelihood of underperforming to any desired confidence interval, such as a 95% or 99% risk of not underperforming by more than a given amount.

The extent to which a fund manager will be prepared to have a higher VaR is likely to depend mainly on:

- ◆ the target level of outperformance;
- ◆ the time-scale over which this outperformance is being sought; and
- ◆ the control ranges/parameters.

Many fund managers object to VaR. The weakness that is often cited about its use is that it gives a false sense of comfort. VaR is frequently calculated using the same normal distribution assumption as the forward-looking tracking error. Critics argue that stocks are not normally distributed but instead are log-normally distributed. Returns on individual risk factors are assumed in this methodology to follow conditional normal distributions.

VaR is really just an alternative representation of the information ratio, in a format that is more intuitively appealing, albeit perhaps with a different shorter time horizon.

The Report Format

Whatever risk or performance measures are used, the performance report format should ensure that formal investment objectives given to fund managers are reported on in full and at regular intervals. In addition, such reports should be linked to the management- and performance-related fees that are in operation. This minimises the possibility of subsequent disagreement between the client and the fund manager over precisely what the fund manager is supposed to be trying to achieve.

There is no one standard reporting template in existence within the industry, in terms of design, presentation or content. This would allow for misrepresentation or omission. That said, fund managers should try to maintain a consistent look and feel in reports.

It is also important to ensure any reporting is internally consistent, practical and achievable within the set timeframes. The report should give an insight into how well the portfolio has performed. A clear and concise summary is a helpful addition to the three key reports: on performance, asset allocation and transaction.

The Performance Report

The performance report is arguably the most important. Table 12.1 shows the key variables.

Table 12.1 Key performance database variables

Beg value	The market value of this line item at the start of the beginning report date (ie, this is the closing value on the date prior to the report's starting date).
Invested	Contributions made by the investor. The sum of all purchases minus all redemptions within the specified date range (does not include reinvested distributions, but includes transactions from the starting through to the ending report date).
Distrib.	Sum of any received distributions during date range (does not include reinvested distributions, but includes distributed distributions from the starting through to the ending report date).
End value	The market value of this line item on the ending report date.
Gain	The value gained by this line item for the specified time period (Gain = End value + Distrib. – Invested – Beg value).
% gain	The percentage gained for this line item for the specified date range.
Yield	The yield for the specified date range.
Benchmark	The index applicable to fund.
Volatility	The standard deviation of portfolio.
Skill measure	Information ratio or Sharpe ratio.
Return series	NAV performance track record.

The Asset Allocation Report

The asset allocation report is produced alongside the performance report. It should show portfolio value allocation among each of the various asset types for both the beginning and ending report dates. In Table 12.2, the following columns are displayed for this report type.

Table 12.2 Key asset allocation database variables

Beg value	Value of this asset type at the start of the beginning report date (this is the closing value on the date prior to the report's starting date).
Beg %	Percentage of portfolio value on beginning date for this asset type.
Invested	Contributions you made into this asset type. The sum of all purchases minus all redemptions within the specified date range (does not include reinvested distributions, but includes transactions from the starting, through the ending report date).
Distrib.	Sum of any received distributions from this asset type during date range (does not include reinvested distributions, but includes distributed distributions from the starting through to the ending report date).
End value	The market value of this asset type on the ending report date.
End %	Percentage of portfolio value on ending date for this asset type.
Gain	The value gained by this asset type for the specified time period (Gain = End value + Distrib. – Invested – Beg value)
Cost	Base cost including fees and commissions.
Currency	Conversion rate.

The Transaction Report

The transaction report is more of an optional extra. It displays a list of all the transactions for a chosen investment or portfolio between the selected dates. In Table 12.3, the following columns are displayed for this report type.

Table 12.3 Key transaction database variables

Date	Date of transaction	
Transaction	Buy	Purchase of shares
	Sell	Redemption of shares
	RnvDiv	Reinvested dividend
	Div	Dividend
	RnvSTCpGn	Reinvested short-term capital gain
	STCpGn	Short-term capital gain
	RnvMTCpGn	Reinvested medium-term capital gain
	MTCpGn	Medium-term capital gain
	RnvLTCpGn	Reinvested long-term capital gain
	LTCpGn	Long-term capital gain

RnvInt	Reinvested interest
Int	Interest
RnvFee	Account fee paid with redeemed shares
Fee	Account fee
RnvRtrnCap	Reinvested return of capital
RtrnCap	Return of capital
RnvOther	Reinvested other distribution
Other	Other distribution
Note	Comment

Price	The share price for this transaction.
Shares	The number of shares acquired or sold for this transaction.
Fee	The fee or commission in US dollars paid for this transaction.
Amount	The value of this transaction, including any fees.
Memo	The memo field associated with this transaction.
Shr blnc	The total number of shares owned at the end of the specified transaction date.
Balance	The market value of the investment at the end of the specified transaction date.

Pricing and Valuation

Pricing and valuation are key to performance and reporting. The most readily available, widely used and easily verifiable valuation method is the mean of the bid/ask spread. Securities valued using this method include equities, futures and listed options. Some securities, however, are not exchange-traded. Dealer quotes are the most common and accepted pricing source for these. All can be found from quotes obtained from pricing aggregators (who gather quotes from various dealers on various securities).

When a fund is using dealer quotes, it generally is preferable to consider multiple quotes for each security. Securities priced using dealer quotes include corporate bonds, preferred stock, sovereign bonds, convertible bonds and commonly traded swaps such as credit default swaps. In the case of less liquid securities, such as loans or private placements, valuation services may be utilised. Due to the expense and complexity of these valuations, they may be performed less frequently.

There are other possible sources of independent prices. That said, administrators have the capability to compare values assigned to a particular security by funds managed by different managers to determine if a security is being consistently valued, and to determine if a manager’s valuation approach tends to be conservative or aggressive.

The author would caution that extra care and controls need to be considered to ensure that changes to valuations are properly handled. Recent hedge fund scandals have made valuation a sensitive area.

In those situations where none of the valuation methods are available, the manager has to determine a fair value for the security. It is the respon-

sibility of the fund manager to ascertain that the process used to arrive at the valuation is independent, transparent and consistently applied. Particular problems arise, in this respect, when moving from mark-to-market pricing to mark-to-matrix and mark-to-model pricing.

Mark to market is where the price of a security is recorded on a daily basis in order to calculate the net asset values (NAV), profit or losses. Mark to matrix is used for less actively traded assets, such as emerging market securities, municipal bonds and asset-backed securities (ABS). It involves estimating a credit spread of the asset relative to a more actively traded instrument that can be priced easily. Mark to model includes industry-accepted models, such as those used to price currency forwards, or models created by the fund manager and used as part of the initial investment evaluation. In the latter case, the valuation model should be reviewed by an independent third party, who may be (but not necessarily be) the firm's independent auditor. In the case of such manager models, auditors typically review whether the manager has consistently used the model as part of the annual audit.

All the methodologies work towards calculating a reliable and accurate NAV. Indeed, mutual funds have to price and redeem their shares at the NAV. Such pricing should have the NAV computed after receipt of redemption requests in order to make prompt payment of redemption proceeds. Going forward, it is widely accepted that the accounting and valuation issues confronting fund managers will continue to engage the minds of regulators. It is beholden on the reporting and valuation team to have a robust methodology in place to satisfy such concerns.

Panel 12.1 Faculty And Institute Of Actuaries' Standard For Portfolio Risk Measurement And Reporting

A fund management company needs to satisfy the following:

- (1) The risk and performance requirements of each fund should be documented and should be framed so that they are not inconsistent with each other.
- (2) A formal monitoring of investment risk should be undertaken at least quarterly or whenever there is a major change to fund structure. More frequent monitoring should be undertaken if trading activity is high.
- (3) The monitoring of risk should, where possible, involve both *ex-post* and *ex-ante* measurement. Ideally this would involve a reconciliation of the *ex-post* and *ex-ante* measurements to assess model risk. Significant changes in risk parameters since the previous analysis should be explained.
- (4) The analysis should contain:
 - ◆ Commentary on the models/methodology used, including when they are likely to break down (and hence suitable caveats/health warnings if appropriate), on any exercise of professional judgement and on the main tasks to which the analysis is or is not relevant.
 - ◆ A statement on the sources of data and on whether there are any

assets (or liabilities) omitted, and the degree to which this might influence the results.

- ◆ Levels of fund turnover and/or other commentary indicating the extent to which the analysis may no longer be relevant because of changes in fund disposition.

(5) The presentation of the results of the analysis should bear in mind the likely recipients of the analysis. In particular, it would generally be appropriate to supply chief investment officers with more detail than most third-party clients would wish to receive.

(6) The analysis could include commentary on the typical risk stances of several portfolios, all run in a similar fashion. If so, the methodology used to construct these composites should be consistent with standard rules on composite construction for performance measurement purposes. If, for example, a house median is to be calculated then the risk characteristics of each individual portfolio in the composite should be separately calculated, and then the median determined from the figures for each portfolio in isolation.

Global Investment Performance Standards

The underlying spirit of the Global Investment Performance Standards (GIPS) is fair representation and full disclosure in performance reporting and valuation. They were initiated by the CFA Institute and partners, who now administer the standards jointly with local country sponsors. GIPS break down barriers to entry and act as a “passport” for fund managers to market their results worldwide. Gold GIPS, introduced in 2004, eliminated the need for separate investment performance standards in different jurisdictions. Most large institutional clients now require or request GIPS data, and it is a good idea for fund managers to be compliant.

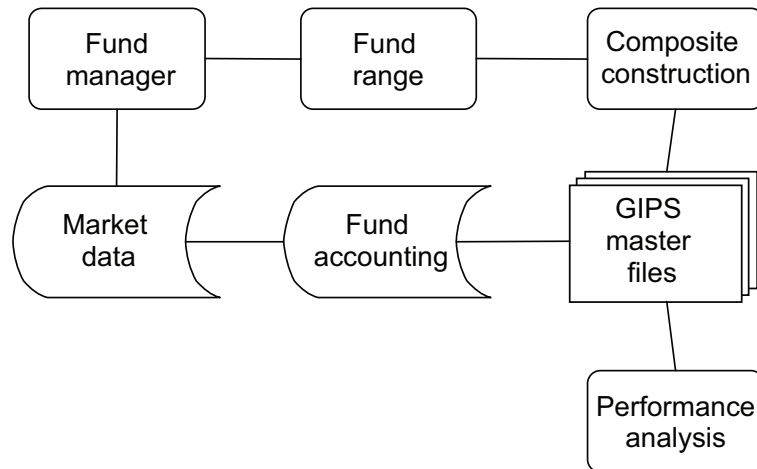
There are a number of issues a fund manager must consider when claiming compliance with the GIPS, including defining the firm, documenting firm policies and procedures, maintaining compliance with updates to the GIPS standards and properly using the claim of compliance and references to verification. Other factors include:

- ◆ it requires consistency of input data;
- ◆ it requires comparability in the use of certain calculation methodologies for both portfolios and composites;
- ◆ it requires meaningful, asset-weighted composites; and
- ◆ it requires disclosures that allow firms to elaborate on the raw numbers provided.

According to the standards promulgated by the CFA Institute, fund managers must have a policies and procedures manual in order to claim GIPS compliance.

Under GIPS, it is necessary to ask if the benchmark is appropriate to the investment strategy, which means checking whether the benchmark adequately reflects the investment strategy and hence the investment decision process. It is also necessary to see if the index has been used consistently over time, and indeed whether the stated index is the formal benchmark for the portfolio. Figure 12.4 portrays this in a stylised way.

Figure 12.4 GIPS



In addition to the benchmark, it should also be stated where the investment style has changed during the period of analysis. Such benchmark changes and changes in style and restrictions should be disclosed. Clearly, it is not appropriate to attribute past data using a current index if changes have occurred. The attribution should reflect the index assigned at the time, and attribution effects should be compounded consistently. Such details are fundamental to compliance.

Fundamentals of Compliance

A fund manager must consider a range of issues when claiming compliance with GIPS. This is because once a firm meets the standards, it must prove its compliance. Consistency of input data is critical to effective compliance. Likewise, achieving comparability among a firm's performance presentations requires uniformity in methods, such as those used to calculate returns. Fortunately, the standards' mandate the use of certain calculation methodologies for both portfolios and composites.

Implementing GIPS is a big project because it is necessary to place portfolios together in groups that represent a particular investment objective or strategy. The desired outcome of this process is to produce composite returns. These are the asset-weighted average of the performance results of all the portfolios in the composite. Creating meaningful, asset-weighted composites is critical to the fair presentation, consistency and comparability of results over time and among firms.

The definition of the firm is the first challenge. Doing this creates defined boundaries whereby total firm assets can be determined.

In order to establish GIPS compliance, a protocol of disclosures has to be made. This allows firms to elaborate on the raw numbers and gives a

proper context in which to understand the performance results. Disclosures are static information and do not normally change from period to period. Although some disclosures are required of all firms, others are specific to certain circumstances and thus may not be required.

GIPS provisions also apply to real estate investments, where returns are primarily from the holding, trading, development or management of real estate assets. Likewise, there are GIPS rules for private equity funds and fund-of-funds.

Soft Dollar Standards

The CFA Institute also produces the Soft Dollar Standards. A soft dollar arrangement is one in which the investment manager directs the commission generated by the transaction towards a third party or in-house party in exchange for services that are for the benefit of the client but are not client directed.

The reason this is important is that soft dollar arrangements can be abused. For example, a fund manager may pay excess commission and receive in return what is termed a first call on an investment idea. To address this, the Soft Dollar Standards focus on the fundamental ethical principles applicable to fund managers as fiduciaries for client assets.

The standards are voluntary and consistent with the CFA Institute Standards of Professional Conduct that all CFA Institute members are required to follow. They define “soft dollars,” identify what is “allowable” research, establish standards for soft dollar use, create model disclosure guidelines and provide guidance for client-directed brokerage arrangements.

Conclusion

All fund managers have to value the assets under their management and report on the performance to their clients. This chapter has shown that there are clear protocols on how that should be done. For example, reporting should be clear, unambiguous, performance stated against a benchmark and risk-adjusted.

Portfolio alpha measurement and beta returns are at the core of performance reporting. Sharpe’s model, which explains portfolio returns with the market index as the only risk factor, is not sufficient. Modern reporting includes attribution, and even factor decomposition.

Data issues are unavoidable in performance reporting. They set the tone of accuracy within the fund management firm. However, this chapter has illustrated that the integrity of the firm’s investment performance track record must always be paramount. Indeed, as a result fund managers have become more proactive in the quality of the valuation and reporting process. In this respect, GIPS are a must, providing clear product composites and performance stated on a level playing field.

The next chapter will investigate product design.

Panel 12.2 Statement Of Financial Accounting Standards No. 157, Fair Value Measurements (FAS 157)

FAS 157

This statement defines fair value, establishes a framework for measuring fair value in Generally Accepted Accounting Principles (GAAP)

and expands disclosures about fair value measurements. It is relevant for the underlying assets in a portfolio of investments.

“A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction between market participants to sell the asset or transfer the liability at the measurement date. An orderly transaction is a transaction that assumes exposure to the market for a period prior to the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities; it is not a forced transaction (for example, a forced liquidation or distress sale). The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. Therefore, the objective of a fair value measurement is to determine the price that would be received to sell the asset or paid to transfer the liability at the measurement date (an exit price).”

Notes

1. The Sortino ratio addresses this, as it has for the numerator the difference between the return on the portfolio and the minimum acceptable return.

13

Product Design

“Wrap, pooled or fund-of-fund products offer simplicity for investors through a packaged solution. These products also offer important diversification by asset class and geography.” *Jonathan Wellum*¹

As with any industry, fund management needs products to be designed, developed and managed. In a commercial context, that means providing diversification and a targeted portfolio. Even with segregated mandates, investment guidelines and objectives need to be formulated. Collective investment products, likewise require a formal structure that can be marketed within the legal framework of the jurisdiction in which it is to be sold. Similarly, segregated mandates require an investment management agreement.

There is a broad spectrum of legal, tax and accounting considerations that impact the product design. For example, the suitability of a fund for a specific individual or institution will affect factors such as:

-
- ◆ the legal structure of the investment vehicle;
 - ◆ the domicile of the investment vehicle;
 - ◆ the laws and regulations of the domicile of the vehicle and of the countries where its investments are made;
 - ◆ whether or not the fund manager has chosen to register with the local regulator;
 - ◆ the characteristics of the other investors in the fund; and
 - ◆ the fund’s overall investment strategy.
-

Once these issues have been addressed, product design allows fund managers to target specific investor clienteles. In this way, fund structures have developed that accommodate different fee arrangements and distribution channels. It is a sad fact that the market for investment is characterised by products that are sold rather than bought. That said, good product design

need not equate with designing a bad product to be sold well. It should be about the approach as much as the wrap.

In addition to the “wrap” and the “approach”, the nature of returns has to be incorporated at the design stage. At this stage, products tend to be categorised as relative return or absolute return. As earlier chapters have shown, the most notable difference between the two is the level of fees. A fixed fee is common in relative return products, while absolute return products have much higher base fees and sometimes additional performance fees, typically between 15% and 20%.

It is often because of the fee representation that fund managers have been widely criticised for poor product design. The UK Treasury, for example, published the Sandler Review into medium- and long-term savings, which concluded that many consumers are being poorly served by opaque and costly investment products, and by advisers who prefer to simply sell managed products without due consideration of the principles of asset allocation and diversification.

In defence of the industry, it should be pointed out that often fund managers do not directly sell products to the customers themselves. Despite this, they still need to consider the end-customer during the various stages of the product design. After all fund managers are not only involved in designing and targeting products but also in providing communications to those firms that sell those products to investors. All these interest groups should be considered when building the product.

Building the Product

The author would argue that the process followed in building the product should be methodical, in that it follows clear and defined rules. It helps if these are created at the outset. Everyone in the firm who is likely to progress to a new product should be aware of the process. A new product team is a good idea, as is a formal product approval process. Likewise, regular meetings and a product timeline have to be pre-established.

At the design stage, products should be defined by their common features – such as asset class, objective and style. The first steps should be to:

-
- ◆ define the objectives of the fund;
 - ◆ define the strategy;
 - ◆ define the methodology and investment process;
 - ◆ determine the fund’s constituents and/or investment universe;
 - ◆ define any unique features;
 - ◆ determine amount of back-testing;
 - ◆ determine the fund management team; and
 - ◆ schedule a development timeframe.
-

In following these steps, it is useful for the design team to think of the product from the client’s perspective. This can help address the fair treatment of customers at the product design stage and allows softer factors to be put in place at the outset. It also helps with identifying target markets and hence sets the scene for the marketing of the product, as well as the subsequent sales and advice that support it.

At the outset, the unique features of the product need to be addressed. These are defined as the identifiable aspects of the total offering that the cli-

ent perceives and they evaluate as an extra to known competitor characteristics among comparable products. They include items such as performance, safety, liquidity, income, taxation or the defining of brand choice to be followed. For example, a decision has to be made as to whether a passive or an active investment process is to be used. At the product design stage this distinction can even affect the choice of legal form, as is the case with index trackers and exchange-traded funds. Typically, things like risk profile and investment universe are also discussed at this stage.

In addition, when building the product the appropriate time to market the product should also be decided. There are certain times of year when conditions are better for marketing a new product, and these should be taken into account in the launch timeframe. Long holidays, like Christmas, Chinese New Year, Thanksgiving and/or Ramadan should be avoided. Likewise, summer holidays' tend to result in senior decision makers being thin on the ground. From a timing perspective, the launching of competitor funds also needs to be taken into account. Perversely, the more competitor funds launched at the same time the better. This is because fund strategies tend to be supported in a herd mentality. Consider, for example, all the technology sector funds that were launched in 1998–99.

The other planning consideration is brand. Clearly, if a firm has a stable of one sort of investment product with a common style or risk profile the product team should be clear where the new product fits into this overall strategy.

Once designed, building the product then requires that it is packaged into a marketable investment product, such as a mutual fund, investment trust or segregated mandate. This stage varies in complexity depending on whether the fund manager performs an exclusively architectural role or one that encompasses architecture and distribution. Although this stage is largely mechanical and legalistic, adequate time must still be set aside. Indeed, unforeseen and frustrating delays often occur at this stage. This is particularly the case with complex or innovative products.

Panel 13.1 Registration Processes

SEC Registration Process for Mutual Funds

Form N-1A is US Registration Statement and includes the Prospectus, a Statement of Additional Information (SAI), Other Information and Signature Pages.

SEC staff review – carried out by Division of Investment Management

Order of effectiveness with definitive prospectus and SAI

Main post-effective requirements:

- ◆ annual update of registration statement;
- ◆ material changes (eg, name, policies, advisory agreement, etc) – automatically effective 60 days after filing;
- ◆ non-material “routine” changes – automatically effective upon filing;
- ◆ shareholder reports – annual and semi-annual reports to be issued to shareholders within 60 days of period end date and to SEC within 10 days of delivery to investors; reports need Sarbanes–

FSA registration process for unit trusts

- Oxley Act certification;
- ◆ complete portfolio holdings to be filed with SEC within 60 days of the first and third quarter, which should also be available upon request to shareholders; and
- ◆ filing fees.

For a unit trust, the FSA will require comfort that the trust deed and scheme particulars conform with the requirements outlined in the CIS/COLL Sourcebook, that the Authorised Fund Manager and Trustee are independent of each other and are authorised persons incorporated in the UK.

For open-ended investment companies with variable capital (ICVCs), they must be constituted under the Open-ended Investment Companies Regulations 2001. An ICVC must have an Authorised Corporate Director (ACD), which is an approved entity under FSMA and may have other directors. Its assets must be held by an independent depositary that is typically a bank and authorised under FSMA.

FSA application time usually takes two to three months and cannot exceed six months.

Currently, Authorised Unit Trusts (AUTs) can be dually or singly priced, while ICVCs have to be single-priced with either a dilution levy policy or a dilution adjustment that will swing the price dependent on net inflows or outflows.

CSSF Registration Process for UCITS

A UCITS or SICAV in Luxembourg is subject to authorisation and supervision by the CSSF. The UCITS will only be authorised if the CSSF has approved the constitutional documents and the prospectus, the choice of custodian, central administrator, transfer agent, investment advisor or manager and auditor. The CSSF will also check whether the promoter disposes of the required professional qualification and relevant experience for the exercise of their functions.

A SICAV can be self-managed or can function through a separate management company.

Innovations

Innovation is occurring fast. For example, new products are now being launched that specifically address investor concerns. New strategies are being developed to allow for shorting and leverage. All sorts of risk–reward payout can now be structured into the product design.

The author likes to remind people that product innovation can also occur from the client’s side. For example, the next generation of pension plan design is the structured–defined contribution plan, which is a plan designed to produce the payout pattern and simplicity of a defined benefit plan using a defined contribution-type institutional structure. In effect, such products include a fund, cashflow management, a hedging overlay and a final distribution mechanism.

The most common “innovation” is removing constraints. Although this

sounds like a step backwards from modern portfolio theory, in practice it is actually promoted as an extension of it. This is because modern portfolio theory calls for diversification into a wide array of uncorrelated assets. Long-only bonds and stocks were historically the only practical way of applying that theory. There are now more options, hence “removing” the constraint to invest in just these two is considered as progress.

Packaged solutions are also on the rise. This innovation frees the investor from the asset allocation decisions involved in managing cashflows, both institutionally and individually. In a world where investors are challenged by the complex variety of products on offer, a total solution becomes attractive. Such solutions combine strategy and execution in a single product.

A new focus of innovation is the creation of outcome-oriented products. These have a great deal of investor appeal. They meet liabilities or aspirations at a certain point in the future. Increasingly attractive packaged innovations include lifestyle funds. Fund managers are developing these to provide an alternative investment to established pension offerings. Such products consider factors beyond age, such as risk tolerance and personal economic conditions.

Another similar outcome-orientated innovation is liability-driven investment. This is where fund managers are developing products to compete with the traditional space held by pension funds and insurance companies. In the past these institutions used to manage their liabilities and ensure they had a stable balance sheet sufficient to match their duration. The new products that are being designed match their asset and liability convexity, immunising them against broad shifts in the yield curve. Clearly, such products are complex to construct and the composition and structure of the product team has to be diverse enough to handle them.

Composition and Structure of the Product Team

The success of any new product depends on a well-structured and properly staffed product team. The author would suggest that such a product team should be charged with ensuring that the investment process is packaged in such a way that it can be sold as definable and repeatable. These teams should be typically cross-functional, and be responsible for the design and launch of new products. Although they clearly face budgetary and time constraints, the latter are largely being driven by the appetite of the market. Given the complex nature and tasks of investment teams, fund management firms should institutionalise the design of these groups.

There is a growing trend among companies to develop funds by tapping into expertise across all parts of the firm. This is best done with a cross-functional product team that should be responsible for overseeing the process of conceiving, creating and launching a product. The key phases in this process are initiation, which covers idea generation, screening, concept testing and implementation. Obviously, this includes product design as well as market introduction. Typical members of such a team are shown in Table 13.1.

Table 13.1 Members and roles of the product team

Team member	Role
Chairman	Usually the CEO or CIO

Project owner	A champion that ensures the smooth running of the launch process
Client-liaison manager	Someone that ensures the product is aligned with the ultimate customer
Marketing manager	Someone that ensures the product can be sold with the right attributes to the right audience
Lawyer	The internal legal team should help with the product's legal wrap
Portfolio manager	Someone from the investment team that ensures the product is feasible
Operations manager	Someone from the back office that ensures integration of the product into existing infrastructure
Compliance	Someone that ensures the product fits in with the rules and regulations of the local regulator

Getting a broad mix, as shown in Table 13.1, is important because team composition affects new product success. Indeed, empirical evidence shows this to be the case. The collective attributes of members influence both the information and resources available for the product launch. This, in turn, ultimately impacts on the ability to raise assets. That said, getting the mix right can work, provided the team sticks to an established timeline and process.

Establishing a Timeline for Product Introduction

Establishing a timeline for a new product enforces discipline. Such a timeline should have all of the different aspects of development, marketing and sales planned out. It is a good discipline for each department in the fund management company to have additional separate timelines and schedules for their own different components. This ensures that:

- ◆ the fund is delivered on time;
- ◆ the fund is delivered on budget;
- ◆ the fund is conceived properly and the process is robust; and
- ◆ the fund launch plan is realistic and regularly updated.

It is due to these four factors that timelines should be followed stringently. The author acknowledges that this usually requires exceptionally good management skills. The CIO or CEO should therefore be given the task of project management, or delegating that responsibility to a product champion. Typically, such a champion should be a senior specialist in the asset class in question.

The marketing timeline helps show what resources will be used and when. Indeed, this is particularly important with high-value employees such as fund managers. It is a good idea to incorporate the portfolio managers into the process as early as possible, even though the temptation is to bring them in at the end. Fund managers are the biggest cost component and, as such, one of the main considerations in determining the fee level.

Determining Fee Levels for New Products

Determining the fee level for new products is perhaps one of the most commercial of the decisions that have to be made. In this context, one of the strategic questions to be asked is whether the fees associated with the fund are reasonable in terms of the market. In order to answer this, it has to be asked in the context of a given level of return. A low yielding volatile bond fund, for example, cannot command the fees of a high-return, high-volatility equity fund.

The product development team has to ask what percentage of the gross return they would like to go to themselves as opposed to the investor. They then have to consider the different fee permutations. These are:

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- ◆ flat fee;
 - ◆ performance fee;
 - ◆ bundled fees;
 - ◆ rebates and commissions; and
 - ◆ penalties and/or high watermarks.
-

Fee structures were traditionally based solely on a percentage of assets under management. Increasingly, however, performance-related fees are being introduced. Some newer models include penalties for underperformance. The product team should work out how these elements are combined. They should be based, at least in part, on underlying trends and competitor positioning and rationales.

The effect of scale on performance and the ability to charge fees is something that can be taken into account during product design. Fund returns, both before and after fees and expenses, decline with lagged fund size, even after adjusting these returns by various performance benchmarks. In fund management terms, big is not always beautiful. That said, it can allow for more competitive pricing.

The author would suggest that it is important for the firm to understand the relative importance of different fee structures. Clearly, fixed income is different from equity, institutional from retail. The author advocates that the product team create a table of data with the different fees charged across the firm between different asset classes and strategies. Part of this process should include the order of magnitude of both costs and compensation paid. This should not just be internal, but include distribution channels, selling networks and customer relationship managers. The data should be presented as a percentage of assets under management (AUM). The fund manager is, after all, running a business. In this respect, the management and performance fees are the firm's key source of revenue.

When to Use Performance Fees

Performance fees should be used to incentivise performance, not simply to enhance income. Performance fees are becoming more common and a part of individual fund manager's remuneration packages.

Despite their increasing prevalence, there has not been much client focus on performance fees. One organisation that has focused on them is the Marathon Club, an organisation set up by UK pension funds to promote long-term investment. In doing this, it supports the wider use of suitably tailored

performance fee structures. It lists the components of what a well-structured performance fee structure should include:

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- ◆ a low base fee, ideally a monetary amount, designed to cover the manager's process costs plus profit margin;
 - ◆ performance-related fees designed initially to bring total manager remuneration towards the level of a "normal" *ad valorem* fee for the asset class when the target return is achieved; and
 - ◆ a ratcheting effect, so that reward progressively increases with outperformance of various "hurdles", subject to a ceiling or absolute cap.
-

The author would add that there are a few other things to watch for. Performance fees should not be used on beta-exposed funds. They should also have some sort of high watermark, so they do not benefit from high volatility. In addition, such fees should be reasonable. Sharing half of the performance achieved above a hurdle rate, for example, is just unrealistic. Typically, up to 20% of the outperformance of the hurdle rate is considered the upper acceptable share. In such a scenario, clients are generally happy to pay the fees. Their biggest concern (assuming they are individuals) then becomes the taxation of the profits they have made.

Taking Taxation into Consideration

Fund managers should always optimise the advantages of the tax status of investment products for their clients. Fortunately, many structures are already tried and tested. That said, new and innovative tax structures can give a fund manager a competitive advantage if the fund manager is a first, or an early, adopter.

There are some jurisdictions where the tax aspects of mutual fund distributions and redemptions are more important than others. Luxembourg and Ireland, for example, have better tax treatment than Denmark and India. Because of this, product designers should take into account:

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- ◆ issues relating to excise and the withholding of taxes;
 - ◆ master-feeder tax issues;
 - ◆ passive foreign investment company tax issues;
 - ◆ preferential dividend issues;
 - ◆ publicly traded partnership issues;
 - ◆ tax treatment of collective investment funds and common trust fund conversions;
 - ◆ tax treatment of fee waivers, rebates and reimbursements; and
 - ◆ tax treatment of private funds, domestic and offshore and their investors.
-

The above taxation issues are fairly standard. However, there are some sectors, such as the pension and insurance industries, which have distinct tax advantages legislated into their products. Fund managers should leverage these wherever possible. Meanwhile, whenever the tax implications are unclear, fund managers should always seek the advice of a tax specialist. In-

deed, tax disclosures are required in fund literature, prospectuses and offering memorandums, and should be part of the standard design considerations.

Design Considerations

Design considerations are essentially the bells and whistles that ultimately differentiate the fund and fund manager from the competition. Attributes such as sponsor reputation and advertisements come into play here. It is these considerations that differentiate the product offering and allow the customer to take a decision based on merit. They include:

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- ◆ look and feel;
 - ◆ integration of product and process;
 - ◆ leverage;
 - ◆ liquidity;
 - ◆ capacity; and
 - ◆ fees and cost.
-

What these points illustrate is that design is as much about branding, and look and feel, as it is about form and function. Firm-wide considerations have to be taken into account at the individual product level. For example, if a firm has an existing fund family, the individual product design considerations are clearly going to be less significant. Such umbrellas, as this family of funds are called, exist because of the benefits of scale (see Chapter 1). Leverage is relevant because it alters the risk profile as well as the return profile. Liquidity is relevant because investors want their assets back at some stage. Capacity is important because the manager can only manage what it is capable of managing.

The author would caution that the degree of research and due diligence in the investment process built into the product will impact the cost of running the firm. Frequent visits to companies in emerging markets, for example, can prove expensive. However, this is generally a matter of style.

In addition, consumers are becoming more interested in products that contain risk-mitigation features. As a result, financial complexity and leverage will require greater attention at the design stage.

When to Incorporate Leverage

Leverage is becoming an increasingly important part of investment products. Some degree of margin trading or borrowing can improve performance considerably, but will necessarily increase the risk level of the portfolio concerned. Fund managers increasingly have to know where to incorporate it. In this respect, leverage should be used only:

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- ◆ when the risks have been explained to investors;
 - ◆ when there is adequate risk control to ensure all the capital is not wiped out;
 - ◆ when the investment guidelines permit; and
 - ◆ where lines of credit have been pre-arranged and priced.
-

Leveraging is generally not allowed for the more conservative fund strategies. That said, even some conservative funds have bye-laws that allow them to use lending to meet redemption requests. In this way such funds may mitigate the disruptive effects of uneven fund flows, although such powers are typically limited to about 10%.

Given the relatively large size of some funds, liquidity is an important factor, particularly in the smaller markets. Buying and selling large lots can move prices on illiquid stocks and result in a manager constantly failing to get the lowest bid or ask. In a worst-case scenario, the manager may fail to find buyers or sellers when needed.

Fund managers are also increasingly making use of options to incorporate leverage into funds. Put options hedge the downside, while call options can be used to provide leverage. The same is true for futures. The diversification of traditional fund managers into such strategies is a growing phenomenon. A survey by KPMG International in 2008 reported on the views of over 300 fund management professionals in 57 countries, revealing that 57% of mainstream fund managers now use derivatives in their portfolios.²

The fund management industry has increased its use of leverage, and extended it to various products, particularly hedge funds, asset-backed structures and even exchange-traded funds. That said, the author strongly believes that leverage should be avoided in illiquid asset classes or strategies.

Addressing Liquidity

Not all investments are liquid, which means that a fund manager may encounter difficulty in realising assets when they want to sell them (or, indeed, can sometimes experience problems buying the quantity desired). Such issues need to be addressed at the design stage.

The underlying securities of any funds are said to have good market liquidity if they are easy to trade. The way to check is to see if they have a low bid–ask spread, and trading results have a small price impact. A fund has good funding liquidity if it has enough available capital, especially in circumstances where it has to fund unexpected redemptions. The meaning of liquidity risk is clear, typically twofold:

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- ◆ market liquidity risk – the risk that market liquidity worsens when you need to trade; and
 - ◆ funding liquidity risk – the risk that an asset manager cannot fund his redemption and is forced to unwind; when leverage is employed, this risk can multiply.
-

Liquidity risk is most pronounced among funds that have to invest in small and illiquid stocks. Indeed, the adverse effects of scale in fund management are directly related to liquidity. That said, evidence has shown that a fund's performance actually increases with size. This suggests that scale need not be bad for fund returns, providing the fund and redemption periods are managed correctly.

Lack of liquidity becomes a bigger problem if fund managers have high turnover rates in their portfolios. Internal limits on the level of turnover or churning of the portfolio are one way to focus manager attention. Indeed, by reducing

churning it is also possible to reduce transaction costs that can hurt performance. These are all issues that should be taken into account when discussing capacity.

Taking Capacity Into Account

Capacity constraints are important to consider during the product design process. Size is often seen as a risk rather than a performance-enhancing factor, particularly when assets grow rapidly. This is because, over time, niches get crowded out by the weight of money chasing the opportunity. It becomes difficult and costly to invest quickly and to execute trades. In addition, size can distract a fund manager with administrative and reporting duties.

Closely linked to capacity is the portfolio concentration. As the number of portfolio holdings increases, a fund's operating expense ratio also increases. As a guide, a fund that holds 100 securities in its investment portfolio will have an operating expense ratio some 8–10 basis points higher than a similar fund that holds 10 securities in its portfolio. On the other side of the equation, larger portfolios allow more investment in underlying instruments. The trick is to get the balance right. This depends a lot on manager style.

The author suggests that the most professional way to address capacity is to have a cap that will be imposed on new investment whenever a fund exceeds a certain size. Some suggest that decreasing alpha is correlated not so much with the absolute size of funds or strategies, but with how many different firms are addressing the same asset class. The problem, they argue, is not daily liquidity in an asset class but when all the players head for the exit door at the same time. Either way, a cap on size should be made and disclosed at some level, in the same way as a fund has to clearly state fees.

Clearly Stating Fees

Much has been written in this report about being client-centric. In the area of fees, all too often there is a lack of clarity and transparency. The effect of fees on fund flow should not be underestimated, and it is best to avoid this (Barber, Odean and Zheng 2005). The author advocates that fund managers should clearly state fees, the calculation methodology and any rebates paid to third parties. Frequency of fees should also be clearly stated in the prospectus or offering memorandum. Complex products often disguise fees by bundling them into the investment solution. This practice should be avoided.

Launching Complex Products

The most difficult aspect of product design is the launch of funds that incorporate derivatives. Such products are designed to have varying terms, payout and risk profiles. These are arranged with instruments such as futures and options, often based on a range of underlying cash assets or an index.

What complex products are aiming to provide is leveraged or hedged exposure. That said, the investment techniques underlying this concept are increasingly esoteric. Such products accentuate diversification benefits through the access that they give to multiple scenario risks and return profiles. In such products, the importance of hedging costs and residual risks cannot be underestimated. Delta and gamma hedging capabilities need to be developed in-house before considering the launch of such products.

The author believes that launching complex products also requires a duty of care when it comes to risk disclosures in the prospectus or offering memorandum.

What to Put in the Prospectus or Offering Memorandum

Prospectuses are an essential requirement for investor protection. Fund managers should adhere to all the legal requirements to include information. Just as importantly, this should only be considered as a minimum. In order to be able to make proper investment decisions, investors must have comprehensive, reliable information.

The prospectus is a legal document that discloses the investment objectives of the fund, operating history, fund management, management fees, portfolio holdings and other related financial data. Fund managers are required to give a prospectus to investors before they invest. The prospectus, or offering memorandum, typically contains:

-
- ◆ any agreements between the proposed fund and third parties, eg, investment advisor, depositary bank, etc;
 - ◆ any other document intended for prospective investors;
 - ◆ CVs of directors and officers of the fund;
 - ◆ details on depositary bank;
 - ◆ draft constitutional documents, articles of incorporation;
 - ◆ draft prospectus;
 - ◆ the fund's central administrative functions;
 - ◆ information on the promoter of the fund;
 - ◆ the name of the independent auditor; and
 - ◆ the fund's distribution strategy, where and to who.
-

Whatever the jurisdiction, the local regulators have a registration process that is generally time consuming, and should therefore be fitted into the product timeline. The board of directors have the ultimate sign-off on such documents and, as such, should always be kept in the loop.

Board of Directors

When it comes to the oversight, fund managers often consider that the most important board is that of the fund manager rather than the fund. In law, that is not correct. The board of directors of any fund are there for the promotion of the investor's interests, not fund management companies.

A strong and competent board of directors are essential for:

-
- ◆ investor confidence;
 - ◆ resolving valuation issues;
 - ◆ handling unusual subscriptions and redemptions;
 - ◆ ensuring the investment mandate is being followed; and
 - ◆ fulfilling statutory requirements.
-

Not only is a strong board a good idea, but some advocate for a partially independent board. Indeed, in the US, the Securities & Exchange Commission (SEC) mandates that the chairman of a mutual fund board be independent of the investment management company that manages a fund, and that at least 75% of the board members are independent.

The author would add that whatever the legal structure, the board of directors have legal oversight and have to take their responsibilities seriously.

Choosing the Legal Structure for New Products

The most important part of the product design process is the choosing of the legal structure. At its simplest, there are three kinds of legal structure: open-ended, closed-ended and segregated. The end client and costs are usually the determining factor for this.

Of all the legal structures, open-ended funds are much more common than closed-ended ones. They are designed specifically as a financial product that allows a group of investors to pool their money together to meet an investment objective. The fund manager, in either case, is the fund sponsor. The legal structures and responsibilities are outlined in Table 13.2.

Table 13.2 Legally responsible parties

Fund manager	Manages the fund's portfolio according to the objectives and policies
Distributor	Sells the fund either directly or through intermediaries
Administrator	Oversees the performance and provides services to the fund
Transfer agent	Executes investor transactions and sends statements
Custodian	Holds the funds assets, maintaining them separately

In the author's experience, the legal and other fees involved in setting up a structure are rarely less than US\$20,000, and can rise to a ballpark figure of around US\$200,000 for bespoke and tailor-made products. Umbrella structures and standard legal templates are therefore sometimes used to keep the costs down. Other fees also play a part. Costs for accountants, directors and registrations vary across the legal structures.

Open-ended funds tend to be the most standardised and therefore cheapest fund structures to start in plain vanilla form.

Open Ended

Open-ended pooled investment vehicles are the most common structure for the retail market. They include mutual funds, hedge funds, segregated portfolio companies and private investment partnerships. These vehicles aim to achieve an attractive risk–return profile by pooling the assets of multiple investors.

The advantage of collective investment vehicles are that they lower average costs through economies of scale, more efficient information collection and processing. The economies of scale include the spreading of fixed operational costs over a larger asset base. Fund managers can also use their size to obtain better trading terms.

Open-ended funds sell and redeem shares directly to investors. The price is based on the fund's net asset value (NAV) and there is no limit to the number of shares a fund can issue. The value of each individual share is also not affected by the number outstanding, because NAV is determined solely by the change in prices of the stocks or bonds the fund owns, not the size of the fund itself.

Some open-ended funds charge an entry load, usually a percentage of NAV, which is deducted from the amount invested.

In the US, the share price of a mutual fund is based on its NAV. Sales load fees are shown separately, as are any redemption fees or deferred sales load. The regulatory framework for such funds in the US is fragmented. On the one hand, the SEC is responsible for the registration of mutual funds and ensures compliance with federal securities laws and its own regulations; on the other hand, the National Association of Securities Dealers (NASD) regulates the distribution of mutual funds by brokers.

In Europe, the drive to harmonise product in the fund management industry has given birth to Undertakings for Collective Investments in Transferable Securities (UCITS). The most common UCITS-approved funds in continental Europe are the *société d'investissement à capitale variable* (SICAV), an investment company with variable share capital at all times equal to the NAV of the fund. The other common form is the *société d'investissement à capital fixe* (SICAF). This is a corporate structure with fixed capital that operates either as an open-ended or a closed-ended fund.

The unit trust structure in the UK is also UCITS-compliant following the introduction of the Financial Services and Markets Act 2000 and the formation of the Financial Services Authority (FSA).

Closed Ended

Close-ended or closed mutual funds are collective funds that are traded on the stock market. Similar to a company, a closed-ended fund issues a fixed number of shares in an initial public offering (IPO), which trade on an exchange. In some jurisdictions they are called investment trusts.

Share prices of closed-ended funds are determined not by the total NAV but by investor demand. Often closed-ended funds are created because the assets that the fund invests in are illiquid, such as real estate, private equity, distressed securities and venture capital.

A sponsor, either a mutual fund company or investment dealer, promotes such funds. The fund retains a fund manager to manage the fund assets in the manner specified. Notice that there is a small risk with regards to control. Once listed, their shares are purchased in the open market in a similar way to stocks. The prospect of buying closed-ended funds at a discount makes them appealing to experienced investors. The discount is the difference between the market price of the closed-end fund and its total NAV.

Master-Feeder Funds

Master-feeder funds can generally be categorised into three types: discretionary funds, fund of funds or feeder funds. Master-feeder funds are most commonly used in offshore situations. It is now common for domestic funds to have an offshore equivalent in a master-feeder structure. In this structure, a master fund is formed and elects to be treated as a partnership for tax purposes. A stand-alone domestic fund and a stand-alone offshore fund then invest their capital into the master.

Certain tax and accounting issues arise in the master-feeder structure that do not normally occur in the side-by-side structure. In order to capture the appropriate incentive fee for each investor at the feeder levels, the calculation at the master level will necessarily refer to the class shares or sub-class

shares of the feeder entities. Similarly, an investor in an offshore fund that is withdrawing funds will be subjected to a crystallisation of their incentive fee.

Fund managers should ensure they have adequate protections in place when trading for both the domestic and offshore funds. This is because conflicts may arise with respect to the interests of the two funds.

Master feeder funds often have multiple classes of shares.

Multi-Class Funds

Multi-class funds offer mutual fund investors different types of shares, known as classes. Each class invests in the same investment portfolio and has the same investment objectives and policies. Additional classes of shares can be issued, if required, to create additional sub-funds, including different:

-
- ◆ asset classes;
 - ◆ currency denominations;
 - ◆ fee structures;
 - ◆ investment advisors;
 - ◆ investment policies or risk profile; and
 - ◆ types of fund structure (guaranteed, closed-end, etc).
-

Each class in a multi-class fund has different shareholders and/or distribution arrangements. These also have different fees and expenses, which means that there will also be different investment performance between the various classes.

Investors should be aware that, typically, multi-class funds have higher operating expenses than single-class funds. A multi-class structure, however, offers investors the ability to select a fee and expense structure that is most appropriate for their investment goals.

Wrap Funds

Wrap funds, where advisors add their expertise in asset allocation to the fund manager's products as an overlay, are becoming increasingly popular. The products of such programmes incorporate asset allocation not only at a high level with equities and fixed income, but also sector allocation, geographic allocation, security selection and the ability to cover global markets, including currency management.

A typical wrap programme has three characteristics:

-
- ◆ an open platform;
 - ◆ a rigorous scientific approach; and
 - ◆ a flexible fee structure.
-

The flexible fee structure allows investment advisors, who are also distributors, to customise their fee level. Mutual fund wrap programmes are generally tailor-made and offer portfolios tied to basic questionnaire-driven objectives such as growth, aggressive and income. The underlying portfolios are

often comprised of proprietary third-party funds, or a combination thereof.

The product design of wrap funds has been helped by the experience of the life insurance industry. In that industry, life policy tax wrappers evolved from simple insured funds into life policy tax wrappers. These became a means to holding a wide range of assets, such as mutual funds, unit trusts and open-ended investment companies managed by third-party fund managers.

Offshore Funds

Offshore funds are those located in any jurisdiction that is not considered a mainstream financial centre. The fund management industry has had to embrace such jurisdictions as a result of client demand. The image of offshore centres is not great, but there is now invariably an independent financial supervisory commission providing regulatory oversight for fund managers in such locations. Indeed, in some jurisdictions the authorities actively want to attract international fund business. In order to do that, some stock exchanges have obtained a status as “recognised” by key destination markets such as the UK and the US.

In most cases the legislation in offshore centres allows for professional funds. These are types of investment fund that are not to be marketed publicly, often limiting the number of members to fewer than 50. The attraction of offshore jurisdictions is that they tend not to tax the profits of investment funds. As a result, gains accrue 100% to the investors without any taxation on the profits.

Conclusion

This chapter has shown the importance of the product wrap. It is a legal form that is specifically designed to meet investor objectives or specific fund characteristics. It also explained that this should be a methodical process, dictated by a product design team with a pre-prepared timeline.

Product design is about look and feel. The concepts of brand and investment process, featured earlier in this report, are important to bring into the design stage.

The alternative fund management industry is the biggest innovator in fund structures. This segment is addressed in the next and final chapter.

Panel 13.2 Sector Definitions and Classification

Fund categories are broadly divided into funds that aim to provide an income and those designed to provide growth, although there are some categories with aims that deliver a mixture of both or are more focused on capital protection. Each sector is made up of funds investing in similar assets, or the same stock market sectors or in the same geographical region.

Absolute return funds: Funds managed with the aim of delivering absolute (ie, more than zero) returns in any market conditions. Typically, funds in this sector would normally expect to deliver absolute returns on a 12-months basis.

Active managed funds: Funds that offer investment in a range of assets, with the manager being able to invest up to 100% in equities at

their discretion. At least 10% of the total fund must be held in non-domestic equities. At any one time the asset allocation of these funds may hold a high proportion of non-equity assets such that the asset allocation would, by default, place the fund in either the “balanced” or “cautious” sector.

Balanced equity and bond income funds: Funds that invest between 20% and 80% in fixed-interest securities, and between 20% and 80% in equities. These funds aim to have a yield in excess of 120% of the local equity index.

Balanced managed funds: Funds that offer investment in a range of assets, with the maximum equity exposure restricted to 85% of the fund. At least 10% of the total fund are typically held in non-domestic equities.

Capital protection funds: Funds that typically offer a strategy that protects all or part of the investors’ capital. Depending on the type of protection provided, investors may be exposed to the risk of counterparty default and with some types of fund may not get back their original investment if encashing early. Investors may need to seek investment advice to ascertain the quality of the protection on offer.

Corporate bond funds: Funds that invest at least 80% of their assets in triple BBB– or above corporate bond securities (as measured by Standard & Poor’s or an equivalent external rating agency). This excludes convertibles, preference shares and permanent interest-bearing shares (PIBs).

Equity funds: Funds that invest at least 80% of their assets in equities that have a primary objective of achieving capital growth.

Equity income funds: Funds that invest at least 80% in equities and which aim to achieve a historic yield on the distributable income in excess of 110% of the local index yield at the fund’s year-end.

Equity income and growth funds: Funds that invest at least 80% of their assets in equities and which aim to have a historic yield on the distributable income in excess of 90% of the yield of local index at the fund’s year end.

Exchange-traded funds: ETFs are structured like a typical mutual fund in that they represent a fractional ownership in an index. They are traded, like individual stocks, on an exchange throughout the trading day. They can also be sold short and bought on margin. They do not levy subscription or redemption charges, but investors must pay a commission to a bank or broker and normal transaction levies to buy and sell ETF shares, as well as annual management fees.

Global bond funds: Funds that invest at least 80% of their assets in fixed-interest securities. All funds that contain more than 80% fixed-interest investments are to be classified under this heading regardless of the fact that they may have more than 80% in a particular geographic sector.

Global emerging markets funds: Funds that invest 80% or more of their assets directly or indirectly in emerging markets as defined by the World Bank, without geographical restriction. Indirect investment not to exceed 50% of the portfolio.

Global growth funds: Funds that invest at least 80% of their assets in equities (but not more than 50% in a single geography) and which have the prime objective of achieving growth of capital.

High-yield funds: Funds that invest at least 80% of their assets in fixed-interest securities and at least 50% of their assets in below BBB–fixed-interest securities (as measured by Standard and Poor’s or an equivalent external rating agency), including convertibles, preference shares and permanent interest bearing shares.

Index-linked funds: Funds that invest at least 95% of their assets in triple AAA-rated, government-backed, index-linked securities.

Money market funds: Funds that invest at least 95% of their assets in money market instruments (ie, cash and near cash, such as bank deposits, certificates of deposit, very short-term, fixed-interest securities or floating-rate notes). In the US, such funds value their investments on an amortised cost basis and maintain their NAV constant at par (net of earnings).

Overseas equity funds: Funds that invest at least 80% of their assets in equities outside of their own country.

Personal pension funds: Funds that are only available for use in a personal pension plan. Pension funds are not to be confused with “ex-empt” funds that are flagged separately.

Property funds: Funds that predominantly invest in property. In order to invest predominantly in property, funds tend to invest at least 60% of their assets directly in property, or invest at least 80% of their assets in property securities.

Protected funds: Funds, other than money market funds, that principally aim to provide a return of a set amount of capital back to the investor (either explicitly protected or via an investment strategy highly likely to achieve this objective), plus the potential for some investment return.

Sector funds: Funds that invest at least 80% of their assets in a particular sector, such as technology and telecommunications, as defined by major index providers.

Small cap funds: Funds that invest at least 80% of their assets in equities of companies that form the bottom 10% by market capitalisation.

Sovereign funds: Funds that invest at least 95% of their assets in triple AAA-rated, government-backed securities.

Specialist funds: Funds that have an investment universe that is not accommodated by the mainstream sectors. Performance ranking of such funds is inappropriate, given the diverse nature of its constituents.

Specific geographies, excluding carve-outs: Funds that invest at least 80% of their assets in equities in one geography equities, but that exclude securities from another specified geography.

Strategic bond funds: Funds that invest at least 80% of their assets in fixed-interest securities. This includes convertibles, preference shares and PIBs. At any point in time the asset allocation of these funds could theoretically place the fund in one of the other fixed-interest sectors, across the interest credit risk spectrum.

Notes

1. Jonathan Wellum, Chief Executive Officer and Chief Investment Officer, AIC Ltd

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Alternatives

“There are actually tangible, significant benefits to alternative assets, which mean that it’s something that will continue to grow in the long run. I suppose alternative assets provide two things, which is, from an adviser or an investor perspective, additional alpha, additional returns and also diversification, especially in terms of providing no market correlative returns.” *David Kan*

Alternative fund management is simply the professional management of investments using unconventional approaches and/or asset classes. Such approaches are increasingly being combined with traditional approaches to give better risk reward or desired investment outcomes.

This chapter begins its review of alternatives with the socially responsible investment (SRI) industry. This is deliberate because, thanks to a negative press, the alternatives industry is often maligned for its departure from mainstream investment. In particular, hedge funds and structured products are often discussed in the press in the context of their downside due to their leverage, use of derivatives and short selling. A more constructive approach would be to focus on the benefits, which is what this chapter will do.

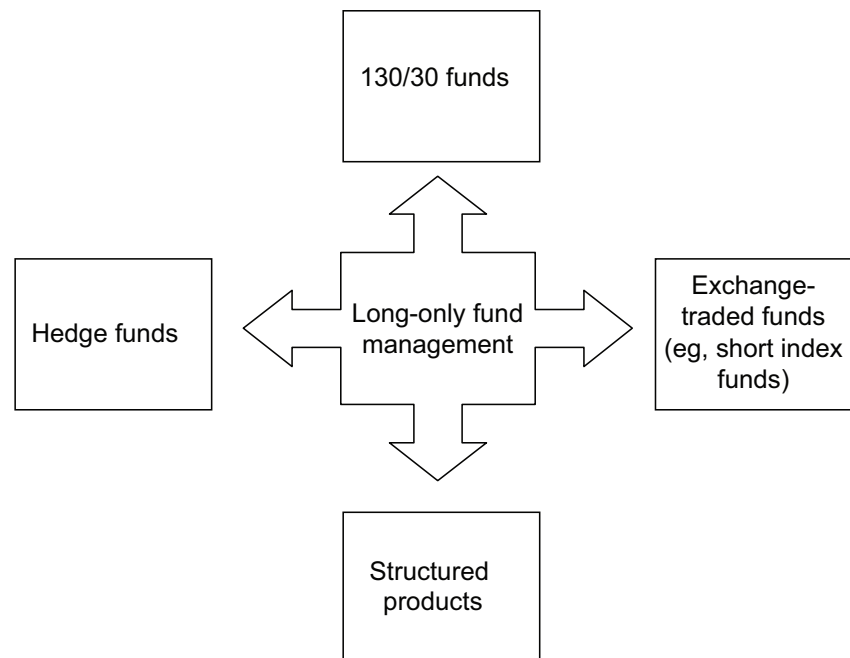
The market for alternative products has exploded in recent years. Many large institutional funds, such as pensions and private endowments, have begun to allocate a small portion of their portfolios to alternative investments and strategies. However, the products that are called alternatives come in many shapes and sizes, and include:

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- ◆ commodity funds;
 - ◆ derivatives funds (including exchange-traded funds);
 - ◆ ethical funds;
 - ◆ exotics;
 - ◆ hedge funds (in their many guises);
 - ◆ private equity funds;
 - ◆ property funds; and

- ◆ structured funds (such as guaranteed and capital protected).

Figure 14.1 illustrates how the long-only world is moving to such strategies, with hedge funds being the most recognised alpha products and exchange-traded funds (ETFs) being the most recognised beta products. That said, alternatives also encourage commodity, property and private equity funds.

Figure 14.1 Long-only fund management diaspora



Alternatives often require unique product structures, as was explained in Chapter 13. Likewise, they almost always require a unique process, even if we are just talking about a socially responsible investment or *Shari'ah* overlay.

Socially Responsible Investment

Socially responsible investment (SRI) is a style of alternative fund management that is based on corporate responsibility and societal concerns being incorporated into investment decisions. As a result, SRI is simply traditional fund management “adapted” to allow for its impact on society.

The investment process typically incorporates screening where the manager applies either a positive and/or negative screens in order to evaluate social, environmental and good corporate governance criteria. Such criteria can include:

- ◆ animal testing;
- ◆ environmental practices;
- ◆ human rights;
- ◆ labour relations;
- ◆ nuclear power;
- ◆ product and worker safety;

- ◆ workplace diversity;
- ◆ industry focus, such as gambling, mining or weapons systems; and
- ◆ product focus, such as alcohol or tobacco.

Socially responsible fund management can follow one of two approaches. The first is values-based, where the fund manager selects investments according to predetermined views of the ethical consequences of the choices. The second is a fiduciary approach, which is founded on the incorporation of environmental, social and governance issues into the investment process to help mitigate risk and enhance return.

The fiduciary approach often focuses on shareholder advocacy or activism. Here, the fund manager takes an active role in using the votes from their investments in companies to impact social, environmental or governance concerns. Such activism can cover:

- ◆ remuneration policy;
- ◆ company strategy;
- ◆ conflicts of interest between owners and management; and
- ◆ engagement of the company in SRI issues.

Socially responsible investment has a long tradition. The first documented investment process that incorporated it was formed in 1750, when the Philadelphia Quakers prohibited the funds it invested in from buying or selling human beings! Fortunately, the world has progressed somewhat since then.

As was explained earlier, SRI is more process-orientated than other alternatives. Fund managers should be aware that such screening can cause a portfolio to be overweight or underweight in particular sectors and have a plan to address this.

To have an effective SRI process, fund managers should develop a plan on how to engage with companies (including deciding on which ones and on what issues). In other words, the whole fund management process should be re-invented, hence the reason such approaches are classed as alternative.

The author would add that it is not just the process that needs to be addressed, but systems as well. Internally, for example, the manager should be sure they are able to exercise voting rights in accordance with the client's instructions. They should also be able to justify how they incorporate social, environmental and ethical matters into their risk management framework and investment process.

Shari'ah-Compliant Investment

Shari'ah-compliant investment is a sub-set of SRI. Sometimes called Islamic finance, it has been around for centuries, but only really began to be adopted by the fund management industry in the 1960s. Since then, the *Shari'ah*-compliant fund management industry, which is itself a sub-sector of Islamic finance, has grown strongly. Estimates of assets under management (AUM), given by the Asian Development Bank in 2010, stands at around US\$1 trillion.

In simple terms, *Shari'ah*-compliant investment is based on the principle that money cannot be made from money. Islam teaches that money has no in-

trinsic value, and therefore Riba (interest or usury) is not allowed. The income generated from investing money therefore has to therefore come from Halal, or permissible activities. Despite this, the investment process is similar to SRI, adopting a negative screen and then investing in the equities that remain, assuming the valuation is right. Such a process screens for items such as:

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- ◆ transactions in unethical goods and services;
 - ◆ earnings return from a loan contract;
 - ◆ compensation-based restructuring of debt;
 - ◆ excessive uncertainty in contracts;
 - ◆ gambling and chance-based games;
 - ◆ trading in debt instruments at a discount; and
 - ◆ forward foreign exchange transactions.
-

Any company's products that have contracts that pass the above screens are considered permissible and allowed to be used in *Shari'ah* compliant products. It is important to ensure that all the companies that a fund invests in are compliant with *Shari'ah* rules and principles. A board of clerics is normally appointed to do this. Before launching any new products and services, the related policies and agreements should be vetted by this board. The *fatawa* and rulings of the board in all financial matters is binding on the fund manager.

Shari'ah-compliant investment funds are predominantly backed by high-net-worth individuals (HNWIs), rather than institutions. Such individuals take their religious obligations seriously and shun interest and leverage. Leverage is at the other extreme from *Shari'ah* investment.

The Use of Leverage

Leverage allows funds to increase their exposure to investment ideas. It is now a major feature of the alternative world. As a direct consequence, their leverage returns are more pronounced on both the upside and downside. Because of this, firms that employ leverage in their strategy should:

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- ◆ have adequate monitoring of margin;
 - ◆ ensure the cost of borrowed funds is competitive;
 - ◆ have robust value-at-risk oversight; and
 - ◆ ensure investor withdrawals are immediately reflected in gearing levels.
-

It should be pointed out that the term leverage can be defined in both balance-sheet terms or in strategic terms. On the balance sheet, it refers to the ratio of assets to net worth. Alternatively, in the strategic case, it is defined in terms of off-balance-sheet leverage, namely risk. In other words, it is a measure of economic risk relative to capital. The most commonly used off-balance-sheet leverage comes from derivatives. These can be cheap and effective to use.

Leverage is often provided to funds by prime brokers. They make use of a practice called rehypothecation to ensure this is a profitable and safe business. Rehypothecation allows them to re-use clients' assets for its own

purposes, thereby adding to their profitability. When assets are rehypothecated, hedge funds lose title to them and are left with a contractual right to their redelivery. The prime broker, meanwhile, receives a fee for lending them to other parties. The prime broker, meanwhile, also charge Libor+ for the provision of leverage backed by these assets.

Although prime brokers take a lot of risk off the table, leverage can be dangerous when incorporated in funds. A number of high-profile collapses show this. In September 2006, Amaranth – a fund that had been trading in energy – shut down following a US\$6 billion loss. According to the *Economist*, it held 10% of the global market in natural gas futures when it went under. The firm’s 100 traders had acquired leveraged positions that were too large to get out from when the market turned against them.

Equally well known was the ironically named Long Term Capital Management fund, which blew up in late 1998 amid the Asian Financial Crisis. The fund had equity of about US\$4.72 billion at its peak, with positions in excess of US\$1.25 trillion. Its leverage and derivative positions resulted in massive gearing.

The Use of Derivatives

A derivative is a financial market instrument. They are not always weapons of mass destruction, as Warren Buffet called them. They are now essential tools in an alternative fund manager’s armoury. The Financial Accounting Standards Board (FASB) defines derivatives narrowly. With some exceptions, it says a derivative instrument can be:

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- ◆ a financial instrument or contract that has one or more underlying exposures or one or more notional amounts or payment provisions;
 - ◆ a financial instrument or contract that does not require an initial investment or requires an initial net investment that is smaller than the amount that would be required for other types of contracts that would be expected to have a similar response to changes in market factors;
 - ◆ the terms of a financial instrument or contract that require or permits net settlement and provides that the contract can be readily settled net by a means outside the contract;
 - ◆ the terms of a financial instrument or contract that provides for delivery; and
 - ◆ an asset that puts the recipient in a position not substantially different from net settlement.
-

The rapid pace of development of derivatives in the market has present challenges to mainstream fund managers. They have to adapt to the new reality. One manager, Morley Fund Management in London, which was responsible for assets in excess of £100 billion, did just that. The company established a derivatives committee for the purpose of regulating the use of derivatives in the firm. Part of the committee’s responsibility was to ensure that all staff members that have authority to either initiate or execute trading in derivatives demonstrate a minimum standard of competence. Morley trained about 80 staff over a period of about six weeks. They now have more trained staff per derivative contract than most of their competitors.

Fund managers have to realise that derivatives are now mainstream. After all, derivatives are now used in many “plain vanilla” products, such as exchange-traded funds.

Exchange-Traded Funds

Exchange-traded funds are index strategies that are actively traded and re-balanced daily on a stock exchange. ETFs have many advantages, the primary one being that they have lower operating expense ratios than other funds. ETFs are based on indexes at the sector or country level. When developing ETFs, the fund manager should ensure that:

- ◆ it has high-calibre personnel with extensive technical resources, to develop and enhance investment strategies;
- ◆ it benefits from economies of scale, the benefit of which is passed onto the clients;
- ◆ it has efficient systems and strong back-office support, which are essential for managing index portfolios; and
- ◆ its investment process is tried and tested.

These points are important to observe because ETFs are designed to provide returns that match as close as possible a certain index. Varieties of ETFs now include short-index exposure and even leveraged long- and short-index exposure. ETFs are also used in other products, such as wraps and structured products.

Structured Products

Structured products, like exchange-traded funds, are growing in importance in response to more specific demands from clients, particularly with regard to guarantees. Structured products can be seen as participations in a strategy with an issue price, issue date, term and interest rate. Such products are not investment funds but are increasingly being developed by fund managers. In Spain, where they are called *fondos garantizados*, structured funds already account for almost 30% of AUM.

Structured products are usually issued as debt obligations and therefore appear as a liability in the issuer’s financial statements. In contrast to an investor in an investment fund, the holder of the debt obligation does not have a claim on a pool of assets, but simply has a general claim against the issuer. In this respect, counterparty risk is paramount.

Such products are effectively tailored solutions. That said, the retail market is dwarfed by institutional use of structures. The three commonly used types of structured product are outlined below.

- ◆ A buffer zone note designed for investors who are comfortable taking some downside risk but would like a buffer to mitigate or moderate losses. In exchange for risking their principal, such investors have greater upside potential relative to a fully principal-protected investment. Such products have a short maturity, often between two and four years.
- ◆ A principal-protected note is designed for investors unwilling to risk

their principal and typically have long-term financial obligations to match. These investments generally offer a return at maturity linked to an underlying derivative, such as a broad-based equity index or a qualified basket of stocks. Investors give up a portion of the appreciation in exchange for protection of their capital. Maturities often range from five to seven years.

- ◆ A return-enhanced note is designed for return-seeking investors. In exchange for accepting full downside exposure in their underlying investment, a return-enhanced investment offers double or triple the equity returns up to a pre-specified maximum. Return-enhanced investments tend to have maturities of one to three years.

Clearly, these are complex products to put together. Timing and pricing are paramount to their success. Crédit Agricole Structured Asset Management, with US\$43 billion under management, is one of the biggest issuers of structured products. The company developed its structured products, or formula funds business as it calls it, to offer clients capital-protected participation in equity markets. It realised that investment banks offering such products to their customers was a threat and responded accordingly, in effect, changing a threat into an opportunity.

Setting up a fund takes time and money. Funds must be gathered quickly to avoid a changing investment thesis and hedging costs. That said, counterparty risk is perhaps one of the biggest issues for senior management to consider when launching structured products, as highlighted by the bankruptcy of Lehman Brothers. This is because it is the investment banks that are best able to put together notes that incorporate exotic strategies.

Exotic Strategies

Exotic strategies are increasingly being launched that invest in esoteric and illiquid markets, and which expose investors to a high level of risk. These can be options-based or just different, like fine wine or art funds.

The term exotic is not really defined, but some take it to mean those funds that aim to replicate or synthesise option-based dynamics. In this respect, the exotic element derives from an unusual payout or new underlying asset, or a combination of both. These include the more exotic forms of beta that represent option-based or dynamic trading strategies.

One so-called plain exotic fund that was launched was themed around stocks that will benefit from perceived and real climate change, taking a view on the consequences of climatic change. Carbon-trading funds, similarly, are increasingly common.

Frontier investments in off-benchmark nascent emerging markets are often lumped in with exotic strategies. Silk Invest, a London-based specialist in frontier markets, prefers to see such strategies as capturing the long-term development dynamics that are inherent in such economies. Clearly, there is a great deal of opportunity in such markets. Many, however, prefer to address the opportunity through private equity.

Private Equity

Traditionally managed separately, private equity is increasingly becoming an integrated part of the fund management industry. The growth of private equity in fund management firms is a classic example of the way the industry is changing.

There are a number of challenges that a fund manager has to overcome when addressing private equity. The team should:

-
- ◆ be able to realistically value businesses in the absence of a market price;
 - ◆ have the ability to contractually structure the investment;
 - ◆ maintain an effective team to both ensure adequate deal flow, and also assist portfolio companies in securing critical resources;
 - ◆ possess the negotiating skills associated with both making and exiting an investment; and
 - ◆ be able to coordinate effective due diligence.
-

Not all fund managers want, or indeed are permitted by the regulators, to manage unlisted securities. In fact, the fundamentals of private equity investment differ substantially from traditional public equity investing. For example, private equity managers may acquire large illiquid ownership stakes with the intention of taking an active role in monitoring and advising these portfolio companies. They cannot easily trade in and out of such positions. They also have a high risk that the venture might not succeed. Needless to say, the return is higher to compensate for this.

Even though private equity is coming into the mainstream, the remuneration of skilled professionals continues to be structured along limited partnership lines. Partnerships allow fund managers to exercise formal and informal control over their investments, and also share the upside reward with the more entrepreneurial managers.

The Role of Limited Partnerships

Private equity investments are typically made through limited and general partnerships. Such partnerships use contractual mechanisms to align the interests of the general and limited partners. They ensure the fund managers have what is called skin in the game. The private equity fund that carries out the investments is referred to as the general partner and the investors in the private equity fund are referred to as limited partners. Fund management firms most often participate in such arrangements as general partners. Most fund management sponsored partnerships are directed toward later-stage ventures and investments in established companies.

The private equity business has developed some elaborate tools to address its own operational best practice. One such tool is termed restrictive covenants.¹ These limit investment powers, thereby solving the agency problems presented by the separation of ownership by the investors and control by the fund manager. Such tools are also used in property funds.

Property

A property fund is a securitised offering giving investors the ability to participate in the property market through a share of underlying property assets. These are interesting because direct investment often carries restrictive in-

vestment sums and transaction costs. Property funds can also be an effective way of investors gaining exposure to different property sectors.

Fund managers have devised a variety of solutions to address this illiquid asset class. Funds can take exposure to commercial property in two ways: they can either hold commercial property directly or invest in property company shares.

The property investment trust sector has seen the greatest growth, with a variety of generalist and specialist funds being launched. Several trusts have used offshore domiciles to enable them to pay out gross dividends. This is particularly attractive, as dividends from onshore trusts and open-ended funds suffer an immediate and irreclaimable tax liability. The industry has devised a range of different structures to address such issues.

Different Structures

There are two main types of property fund structure, open-ended and closed-ended. Closed-ended funds include investment trusts, real estate investment trusts and property funds traded on the stock market, and are the most appropriate in view of the liquidity of the asset class.

The closed-ended property structure makes life simpler for the fund manager. Closed-ended funds can be geared and longer term in their focus. The major downside of the closed-ended structure is that a fund's shares may trade at a discount or a premium to their true net asset values.

Open-ended property funds, on the other hand, do exist. Indeed, some offshore open-ended funds use gearing and limited redemption periods, giving them some of the benefits of closed-ended funds. Most open-ended funds do not hold property directly, but rather hold the shares of listed property companies.

The main advantage that fund managers can bring to the table is geographic diversification. This helps reduce risk and can even boost income yields. Fund managers may also be able to spot markets with more potential for capital growth. On the other hand, it is hard for direct property funds to switch holdings quickly, so managers would find it hard to respond to short-term trends. That is more in the domain of hedge funds.

Hedge Funds

The fund management industry is being reshaped by hedge funds. The term hedge fund is used to describe a variety of collective funds that hedge some element of risk. Although it is not statutorily defined, the term encompasses any pooled investment vehicle that is privately organised, managed by professional investment managers and restricted in its marketing.

The fund management industry is still grappling with ways of bringing hedge funds into the mainstream. Various strategies to do this include:

-
- ◆ taking equity stakes in hedge funds;
 - ◆ seeding, and hence revenue sharing, with new funds;
 - ◆ buying out successful funds;
 - ◆ hiring junior members of successful hedge funds teams; and
 - ◆ providing platforms upon which managers can launch new funds.
-

Hedge funds are similar to the collective investment vehicles managed by traditional fund managers. In both instances they issue securities to invest-

tors and hold pools of securities and other assets through which investors can obtain, among other things, investment diversification and professional fund management. Despite what the press says, most hedge funds are relatively small, with the vast majority controlling less than US\$100 million in invested capital. The majority of reporting hedge funds, also contra to popular belief, have balance-sheet leverage ratios (total assets to capital) of less than 2-to-1.

Hedge funds are becoming an increasingly important part of the fund management industry, primarily because hedge funds are able to pay better salaries in the marketplace – due their fee structure, as it is based on a share of the performance.

Hedge fund managers are essentially absolute return managers, or at least that is what they like to claim. That is, they say they are fund managers without a benchmark, or with a benchmark that is the return on the risk-free rate. Absolute return managers focus on total risk whereas relative return managers, the more traditional part of the industry, focus on active risk. Absolute return has become an increasingly popular form of return, following a change of mindset after a series of harsh bear markets.

The first hedge fund, established in 1949, sought to minimise risks by hedging its investments, hence the name. Such hedging, namely downside protection, is closely related to avoiding negative compounding. Most would claim, however, that they aim to provide positive returns for investors regardless of whether the market goes up or down. To achieve this, they use financial instruments such as derivatives or futures to protect the downside. In reality, such absolute investment goals prove hard to achieve.

Hedging techniques can vary dramatically between funds. Table 14.1 shows a few geographic strategies and their different techniques.

Table 14.1 Geographic strategies and hedging techniques

Geographic strategy	Hedge technique
Global equities	Investing in all markets using broad indexes and other markets to hedge
Emerging markets	Investing in emerging markets resorting to other markets to hedge
Frontier markets	Investing in pre-emerging markets, resorting to currency and commodity markets to hedge
Latin American	Investing in Latin America, using short selling to hedge
Pacific rim	Investing in Japan and other Asian markets, possibly including Australia and New Zealand, using short selling to hedge
Eastern Europe	Investing in Eastern Europe, possibly including Russia and ex-CIS countries, using short selling to hedge
Brazil, Russia, India, China (BRIC)	Investing in Brazil, Russia, India and China, using short selling to hedge

Hedge funds are essentially just sophisticated fund managers, although for tax reasons they tend to be located in more exotic locations.

Location

The US is the leading hedge fund centre in the world, managing 70% of global funds, followed by the UK, which manages 15%. The latter is the leading European centre for hedge fund management, with an estimated 70% market share. Despite their physical location, most hedge funds are domiciled offshore. The most popular domicile is the Cayman Islands, which accounts for the domicile of 80% of all hedge funds. In reality, a hedge fund can be managed from anywhere in the world.

There are over 10,000 hedge funds globally. In the US, as at 2010, the SEC regulates an estimated 2,000 hedge funds. This number includes 50 of the largest funds, accounting for about a third of hedge funds' AuM.

In Europe, hedge fund managers are also regulated if they are onshore. They must be registered and approved by their national regulatory authorities and, as with the rest of the fund management industry, agree to maintain systems and controls appropriate to their business. They may only market their services to a relatively limited number of qualified and knowledgeable investors. The European hedge fund industry must also comply with a number of EU directives.

The other major offshore domiciles are Bermuda, the British Virgin Islands and Delaware. The administrators are also generally located offshore, most commonly in Ireland, Cayman Islands and the Dutch Antilles. The location is very different from the traditional fund management industry, where most of the managers, funds and administrators are located onshore. Being offshore also helps the fund managers protect their own fees from taxation.

Hedge Fund Fees

As was shown in earlier chapters, hedge fund fees are performance-orientated and very remunerative in the event of success. A hedge fund generally receives compensation composed of an investment management fee and an incentive allocation. The investment management fee is an asset-based fee that is similar to the advisory fee charged by a fund manager, and is designed to provide the fund with current cashflow to maintain operations. The investment management fee is usually 1–2% of net assets.

The asymmetry of the hedge funds world's fee architecture is what attracts individuals to leave the traditional long-only world and set up their own hedge fund. After all, if they are successful, they share in investors' profits; if they are unsuccessful, they do not have to share in their losses. The resulting dynamic is that, in a worst-case scenario, investors get 100% of any loss and a 2% management fee. In a best-case scenario, they get 20% of the profits less a 2% management fee. In other words, it is a biased game in favour of the fund manager.

Any incentive is usually calculated as a percentage of the hedge fund's net investment income, realised capital gains and unrealised capital appreciation. This encourages the manager to adopt leverage as part of their strategy.

Leverage

Leverage is an integral part of most hedge funds' investment strategy. There are two ways that leverage can be defined in the context of a hedge fund. The first involves borrowing from a prime broker, which is done to boost the potential return, and is termed balance-sheet leverage. The second is where the fund can take off-balance-sheet positions, such as derivatives and structured notes. These positions can amplify returns by allowing exposures to underlying assets without requiring a cash outlay. This type of leverage is called instrument leverage.

Whatever leverage method is pursued, there are two different calculations to illustrate how much leverage a fund has:

- ◆ the gross value of assets controlled (longs plus shorts), divided by the total capital (gross market value/capital); and
- ◆ the value of the long assets only, divided by the equity capital (long market value/capital).

Leverage differs between strategies, often limited by the volatility of the asset class or strategy. Table 14.2 shows typical leverage ranges for balance sheets.

Table 14.2 Typical leverage rates

Strategy	Balance-sheet leverage
Long only	1–1.3
Short selling	1–1.5
Emerging markets hedged	1–2
Market neutral	1–5
Risk arbitrage	2–5
Convertible arbitrage	2–10
Fixed-income arbitrage	20–30

As a result, leverage should not theoretically affect the level of risk-adjusted return within a strategy. It should only be applied in instances where the manager has skill and the investor knows the risks if they get it wrong. After all, many hedge funds have fixed commitment periods and there is no quick exit.

Commitment Period (Lock-Ups)

Hedge funds typically require an investor's capital to commit for a fixed period of time. Commitment periods, or lock ups, for hedge funds typically range from one month to two years, depending on the liquidity of the strategy. Investment money has been raised with extended lock-ups for two to three, and even five, years with either lower fees or penalties for early withdrawal.

In some jurisdictions, the commitment period determines the status of the fund. In the US, for example, an investment fund will be considered a private fund only if it allows investors to redeem their investment within two years of the investment. The rule provides an exception to the two-year lock-up

requirement by permitting redemptions under extraordinary circumstances.

Commitment to a hedge fund usually also includes a minimum investment, either mandated due to the professional investor requirements, or selected to ensure that retail flow does not damage the investment strategy. Typically, the sums are fairly large, such as US\$100,000 or US\$1,000,000 in the US and €100,000 and €1,000,000 in Europe. Larger investors sometimes get preferential terms that are the subject of side letters.

The Use of Side Letters

Some fund managers who give preferential treatments to certain investors do so through side letters. Often, this occurs without adequate disclosure to other investors, which can lead to unfairness and conflicts of interest.

Disclosure is the suggested solution to this problem. The Alternative Investment Management Association (AIMA)² issued guidance on side letters. Fund managers should disclose to investors the existence of side letters and their material terms, such as preferential redemption rights.

For the sake of clarity, a material term is any term the effect of which might reasonably be expected to be to provide an investor with more favourable treatment than other holders of the same class of share, thereby enhancing that investor's ability either to redeem or consider redeeming shares. An example would look like this:

“We have entered into side letters with certain investors which contain material terms. The areas they cover are: XYZ.”

Such side letters often cover the redemption terms.

Imposing Redemption Terms

Hedge funds do not typically permit redemptions of capital at any time prior to the valuation date, except in extraordinary circumstances. Typically, the redemption is locked in over a number of such dates. Redemption terms such as gates, side pockets and suspensions are also written into the prospectus or offering documents.

Such documentation provides broad language on what are termed gates. Side pockets are also increasingly being used by fund managers, as a solution to redemption problems. They are invoked when hard-to-value securities are separated from the balance of the fund's readily valued assets, thus allowing NAVs to be calculated for the non-side-pocketed assets. Table 14.3 illustrates how this works.

The reason such methods are necessary is that liquidity is proving to be a big issue. As a result of the forced selling and de-leveraging process that occurred in 2008, many hedge funds were forced to impose liquidity constraints on redemption requests. Credit Suisse estimated that, in 2009, about 9.6% of hedge fund AUM were classified as impaired, meaning suspended redemptions, imposed gate provisions or side-pocketed assets.

Figure 14.2 was produced by the Hedge Fund Standards Board to show how these various methods are imposed depending on the liquidity of the market dislocation.

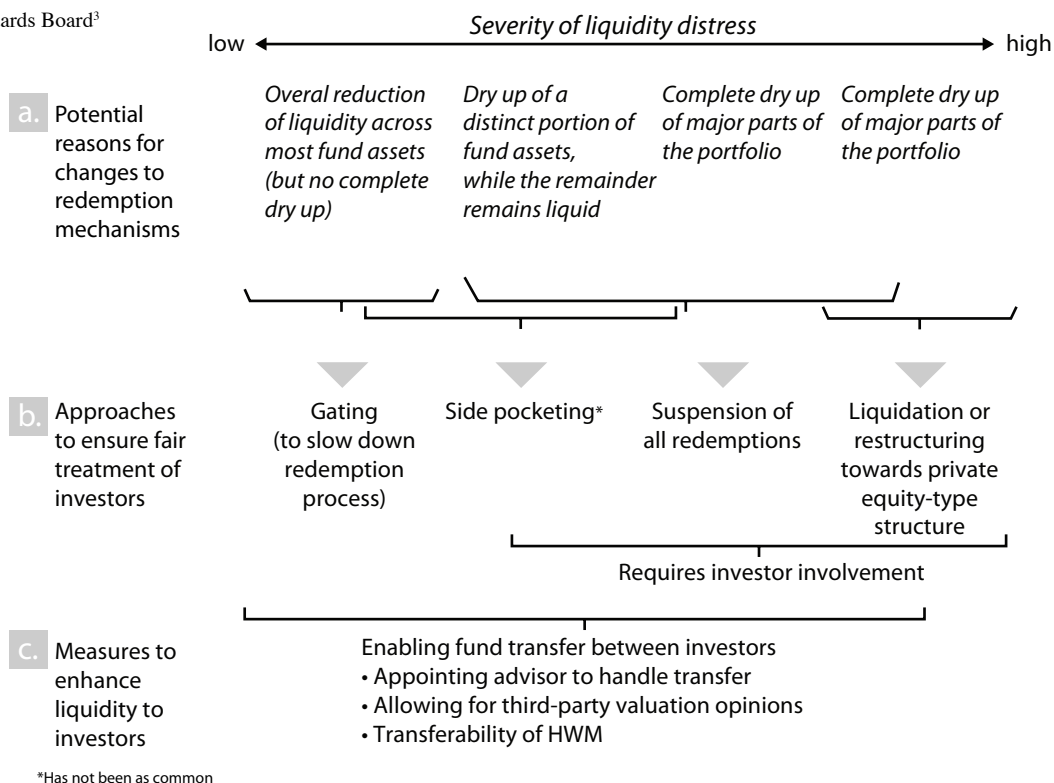
Table 14.3 Redemption mechanisms

Source: Hedge Fund Standards Board

Mechanism	Explanation	Additional considerations
Gating	A gate provision is a restriction placed on a hedge fund limiting the amount of withdrawals from the fund during a redemption period, eg, by limiting withdrawals to a certain percentage of a fund's AUM for each period.	Upfront disclosure of the gating level.
Suspension of redemptions	Complete suspension of redemptions, no investor can withdraw.	This measure is obviously at the more "draconian" end of the spectrum, requiring a sound assessment that it is in the best interest of investors (eg, in comparison to other measures).
Side pocketing	The fund is split into a liquid and an illiquid share class, with all investors holding a stake in both share classes. Redemptions can continue on the liquid part (though a gate could be imposed on the liquid share class), while redemptions are suspended on the illiquid shares.	<p>Side pockets can become complex to administer, in particular if multiple side pockets surface over time.</p> <p>Calculation of fees need to be carefully managed, ie, ensuring that fees are separately calculated for the liquid and the illiquid share classes.</p> <p>Investors might seek to negotiate fee rebates on side-pocketed assets.</p>
Liquidation	If redemption requests exceed a certain percentage of total fund AUM, fund directors might decide that it is best to unwind the entire fund.	<p>Fund directors might wish to consult with investors to let them vote on how to handle the unwinding process.</p> <p>In specie redemption is usually not considered a favourable option by investors.</p>

Figure 14.2 Handing redemptions during liquidity distress

Source: Hedge Fund Standards Board³



As a final note, the author would point out that honouring their investors’ contractually agreed redemption rights is a fund manager’s fiduciary duty. Such methods should be a last resort, not a means to preserve AUM. The strategy often impacts the liquidity.

Hedge Fund Strategies

There are a whole range of hedge fund strategies, all producing different levels of risk, leverage and market hedging. According to Goldman Sachs, “the term hedge fund includes a multitude of skill-based investment strategies with a broad range of risk and return objectives. A common element is the use of investment and risk management skills to seek positive returns regardless of market direction”. Describing every such strategy would take a book in its own right – and, indeed, there are many such books in the marketplace. That said, some commonalities in strategy do exist.

The most common element of hedge fund strategies is the calibre of the fund manager they attract. The remuneration model means that the brightest and best alpha producers are attracted to the industry. As such, most, if not all, of the strategies employed by successful firms are considered as cutting edge, including the use of complex financial instruments, both long and short instruments and multiple asset classes.

Convertible Arbitrage Funds

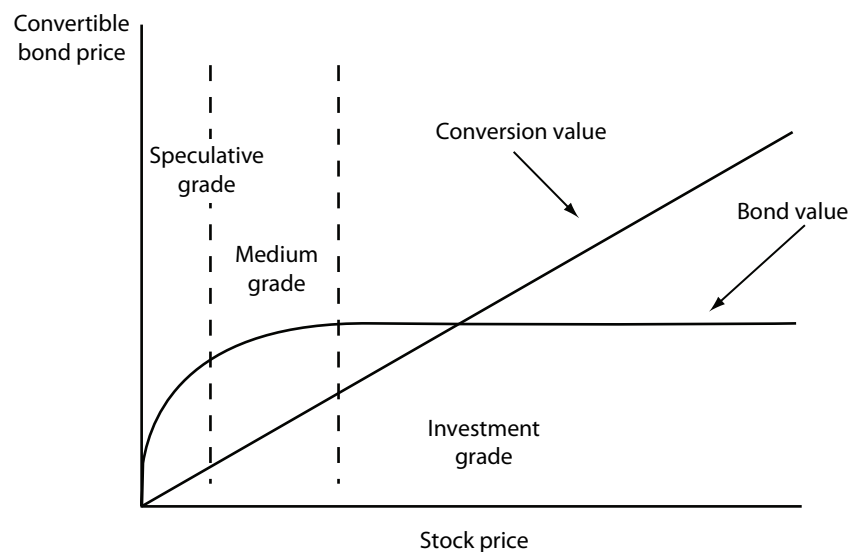
Convertible arbitrage funds take long positions in a company’s convertible bonds, preferred stock or warrants that are deemed to be undervalued, while

taking short positions in the same company's equity. By selling a stock short, convertible arbitrage funds can become stock market neutral. Maintaining such a market neutral position may require rebalancing through delta hedging.

Convertible arbitrage funds typically leverage up to six times, while the equity hedge ratio may range from 30–100%. The average grade of bond in a typical portfolio is BB–, with individual ratings ranging from AA to CCC.

Figure 14.3 illustrates that the conversion value of a convertible is a minimum value or price at which the security is expected to sell. If the market price falls below the conversion value, the convertible arbitrage funds would quickly take advantage of the mispricing. The fund would buy the bond and simultaneously sell an equivalent number of shares in the underlying equity. The difference between these two values would be risk-free profit to the fund.

Figure 14.3 The payoff between different convertible conversion levels



As a result of the risk-free nature of the above trade, hedge funds have become the dominant buyers and traders in the convertible bond market.

Distressed Securities Funds

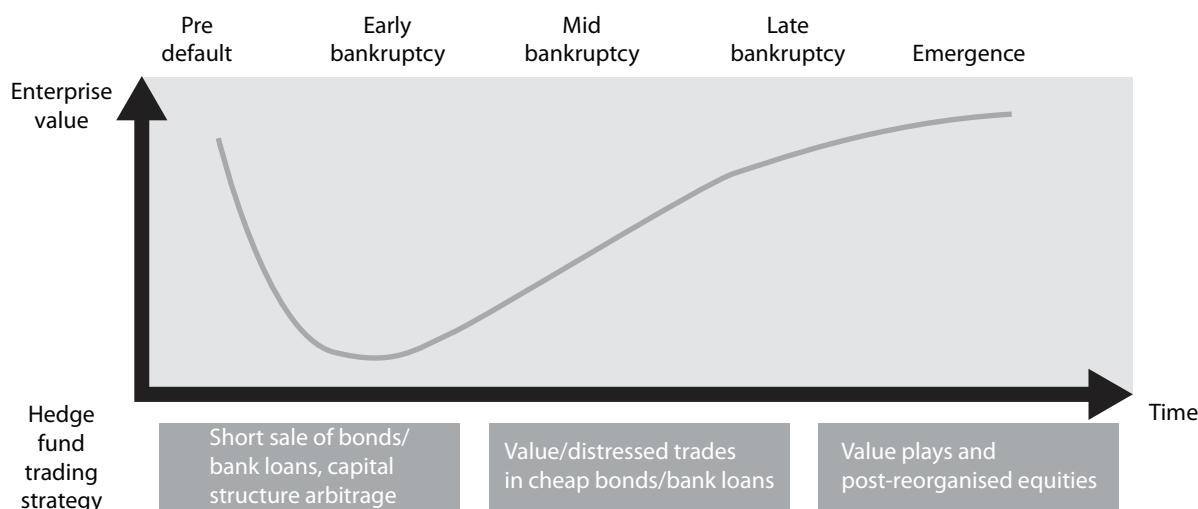
Distressed securities funds take long and/or short positions in an attempt to profit from pricing anomalies among securities in distress. Such distress can include corporate reorganisations, bankruptcies, distressed sales and other company restructurings. Successful funds require:

- ◆ an in-depth understanding of the true risk and values involved;
- ◆ a knowledge of the legal background;
- ◆ previous exposure to the bankruptcy process;
- ◆ restructuring expertise;
- ◆ negotiation skills;
- ◆ an in-depth understanding of correct valuation; and
- ◆ a large network to source/access distressed deals.

The biggest distressed opportunity typically arises when a company, unable to meet all its debts, files for bankruptcy. Distressed bonds typically trade at a yield-to-maturity of over 1,000bp over local Treasuries, or below 80 cents on the US dollar. Trading these can prove lucrative. Distressed strategies work throughout the business cycles, as Figure 14.4 illustrates.

Figure 14.4 Lifecycle of distress from a hedge fund perspective

Source: RMF Investment Management



The investment process is both top down and bottom up. The analysis is a combination of quantitative and qualitative analysis, focusing on a company’s fundamental business, its creditworthiness and its competitive strengths and weaknesses. Hedges typically include put options or put options spreads.

Fixed-Income Arbitrage Funds

Fixed-income arbitrage funds seek to provide stable, positive returns by seeking to profit from this disparity by purchasing, for example, one European sovereign bond and selling another. By definition, arbitrage is about getting risk-free returns by exploiting price differentials.

Fixed-income arbitrage funds tend to use a lot of leverage, although this has decreased since the collapse of Long Term Capital Management. Current leverage averages out at about seven times AUM.

It is because such funds capitalise on price differentials between the spot market and futures and options market that, in theory, they should do well during periods of higher volatility. This provides more chances of mispricing of securities in the spot and derivatives markets. Such funds can also try to increase their returns by taking synthetic positions.

Long/Short and Equity Market-Neutral Funds

Long/short funds, such as sector and market-neutral/relative value funds, employ shorting. They aim to exploit perceived anomalies in the prices of securities. For example, a fund may buy equities that it believes to be under-

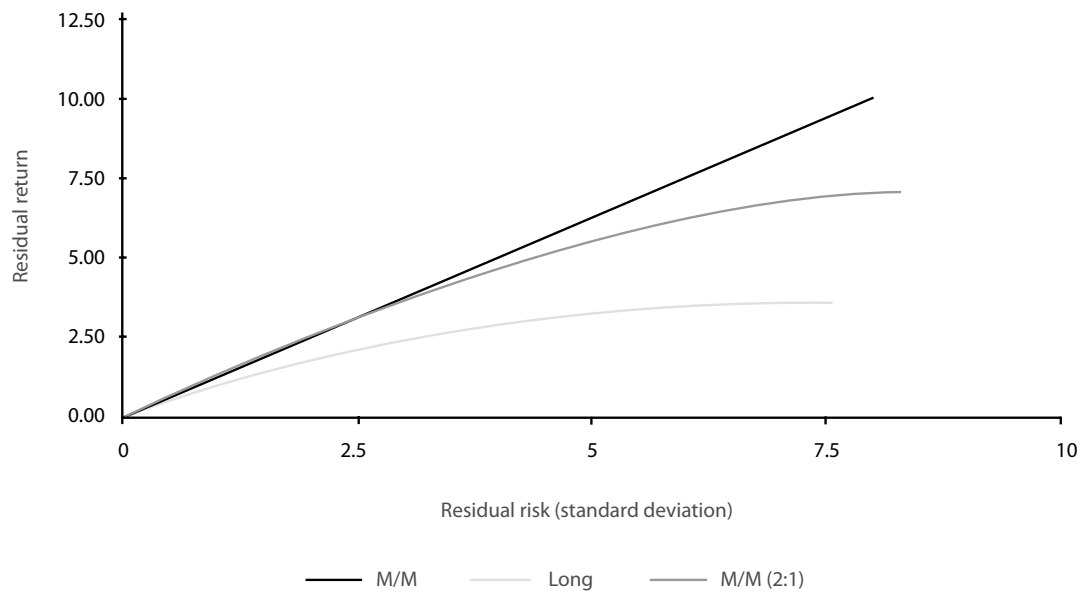
priced, and sell short equities that it believes to be overpriced.

Market-neutral portfolios are long/short funds that are designed to be either beta- or currency-neutral. They aim to produce consistent returns with very low volatility and correlation in a variety of market environments. The investment strategy is designed to exploit equity market inefficiencies and usually involves being simultaneously long and short matched equity portfolios of the same size within the same country.

Figure 14.5 illustrates the theoretical case for market-neutral funds by plotting three ex-ante residual efficient frontiers. Barra calculates that, for a risk level above 1%, the opportunity set of the illustrated long-only strategy becomes increasingly inferior to those of market-neutral strategies. Beyond the 4% risk level, the market-neutral strategy with leverage of 2:1 starts to underperform the fund with unconstrained leverage.

Figure 14.5 Risk return of long/short strategies

Source: Barra



where:

M/N = Market-neutral strategy with unconstrained leverage

Long = Traditional long-only strategy

M/N (2:1) = Market-neutral strategy with leverage 2:1

In this example, the reason for the superiority of the market-neutral strategy, assuming alpha is present, is that the long-only portfolio consists only of long positions and has no leverage. The fund manager cannot therefore take advantage of any information that will lead a stock to underperform. The most they can do, in a traditional sense, is to underweight a stock relative to an index.

Market neutrality encompasses both US dollar neutrality and volatility neutrality. Dollar neutrality is defined as a portfolio in which both long and short sides have a US dollar equivalent weighting of stocks. Volatility neu-

trality, however, is when both the long and short sides of the portfolio are balanced in terms of volatility.

To maintain market neutrality, frequent re-balancing is necessary as differential returns between the long and short sides create imbalances. In the author's opinion, this is a difficult strategy to get right in reality.

Macro Funds

Macro funds take positions in currencies based on their opinion of various countries' macroeconomic fundamentals. Macro funds are either classified as directional or relative value. George Soros runs one of the most well-known macro funds, the Quantum fund.

Macro funds undertake tactical trading on the future direction of currencies, commodities, equities, bonds, derivatives or other assets. Their most publicised activities are speculation on exchange rate movements, usually shorting the currencies of countries whose economic policies look questionable. For example, if a government's fiscal policies look unsustainable and its ability to sustain its exchange rate appears questionable, macro funds would take a position betting on devaluation, usually by selling the currency short.

Risk/Merger Arbitrage Funds

Risk/merger arbitrage funds attempt to profit from proposed mergers by taking a long position in the equity of the company to be acquired and simultaneously taking a short position in the equity of the acquiring company. In other words, they take advantage of information and pricing anomalies during corporate actions.

Statistical arbitrage funds (known as stat-arb funds), on the other hand, attempt to profit from pricing inefficiencies identified through the use of mathematical models known as algorithms. Statistical arbitrage attempts to profit from the likelihood that prices will trend toward some sort of mean revision.

Counterparty Credit Risk Exposure

As a direct result of both on- and off-balance-sheet leveraging, hedge funds have far more counterparty risk exposure than traditional fund managers. This has to be managed and controlled. Exposure to counterparties can arise from both trading and borrowing relationships. These arise from derivatives and repurchase agreements, all of which contain counterparty risk.

In order to understand counterparty exposure, it should be appreciated that the credit exposure of a typical transaction has two components: the current credit exposure and the potential future exposure. The current credit exposure represents the replacement cost of a contract if one party to the transaction defaults. The potential future exposure is an estimate of the possible increase in a contract's replacement value over a specified interval in the future. This can, for example, be between the time of a potential default and the time the counterparty is able to replace the contract.

There are a number of ways that hedge funds can address counterparty risk in addition to those mentioned throughout this report. These include:

- ◆ determining who has responsibility for monitoring, mitigating and reporting on them;

- ◆ undertaking scenario analysis to identify events that could hurt the organisation;
- ◆ using stress-testing models; and
- ◆ ensuring the fund manager periodically assesses the types of exposures they are engaging and identifies single-name risk, counterparty exposure, excess concentration, liquidity and sector/asset exposure.

Critical to the overall effectiveness of the counterparty risk is a senior management team and board of directors. They should not rely on models, but rather a range of tests and crosschecks of assumptions. Hedge funds will have to take counterparty credit risk more seriously if they are to compete successfully in the future.

The Future of Hedge Funds

The future of hedge funds was called into question during the credit crisis, when they failed to collectively deliver on their promise of a hedged alternative. That said, their future is assured, although perhaps their fee model might not be.

The author believes that the reason hedge funds will continue to prosper is that they have excellent investment expertise, infrastructure and technology. Indeed, they increasingly have the ability to innovate in areas such as algorithmic trading, certain types of flow derivative and foreign exchange trading.

Clearly, regulation is going to alter. Most hedge funds are not registered as fund managers, and they are generally not required to meet prescribed disclosure requirements. However, this will change. Likewise, hedge fund managers are currently bound by a private placement memorandum, which discloses information about the investment strategies and how it operates. Although this sounds binding, in practice the private placement memorandum typically provides such funds with maximum flexibility in strategies. Such documents will also change going forward.

Although often managed onshore for tax and other reasons, many hedge funds are based offshore in a foreign jurisdiction, with an increasing push away from developed economies towards such centres. Again, this looks set to change.

The rehypothecation model of prime brokers, where they take control of assets, also looks set to change. This may make funding more costly for hedge funds in the future. In addition, leverage and risk look set to change structurally. Allied to this is an evolution in the administration of such funds.

The era when hedge funds used self-administration operating models is largely over. They are being replaced by a higher level of outsourcing of custodial, multi-prime and related services to third-party specialist providers.

Conclusion

This chapter has shown that alternatives are merely an extension, if not the cutting edge, of the fund management industry. Alternatives can overcome the constraints imposed by increasing financial complexity and specialisation. Through their innovation, they are re-writing the way fund management firms operate. As a result, traditional fund management companies are embracing these new approaches by applying their own proven techniques

in management, control and operations.

Traditional fund management firms that embrace alternatives should also address their limitations. The traditional industry is better placed to weather the impact of future shocks to financial markets and have better financial reserves, although they are not as dynamic. Such firms should consider the attractiveness of current and likely futures and alternative strategies, and ask if the alpha is sustainable and repeatable.

The key elements of competition in alternative fund management, as in traditional firms, are returns relative to other firms, and reputation with customers and advisers. Distribution channels, relationships and reputations are as important as in traditional fund management, if not more so. That said, the alternative providers have shaken the industry up and traditional firms now have to respond.

This chapter, and the report, concludes with the observation that the body of knowledge on how to optimally run a fund management firm is firmly established. These best practices and focus on process are equally applicable to traditional or alternative fund managers. Following such best practice, and delivering superior results, is the only true route to commercial success.

The End

The author concludes this report with a quote as it sums up the theme of best practice that runs throughout these pages.

“The concept of ‘best practices’ has emerged to define how leading firms perform specific business functions. While ‘best’ is subjective – ‘pretty good practices’ is just not as attractive.” *Adam Schneider, Deloitte Consulting LLP*

Notes

1. The restriction involves co-investment of the fund managers themselves, and relates to the personal funds of the fund managers. It limits the incentive problems associated with the allocation of attention by the fund managers to different entrepreneurial firms in the fund portfolio.
2. The Alternative Investment Management Association is the hedge fund industry’s global, not-for-profit, trade association with over 1,100 corporate members. It is committed to developing industry skills and education standards, and is a co-founder of the Chartered Alternative Investment Analyst (CAIA) designation.
3. HFSB Consultation Paper 1/2009 (CP1/2009).

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