

CHAPTER 1

Overview of Book and Key Concepts

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Our goal in writing this book is to provide investors with a practical guide to portable alpha theory and practice, with a focus on the concepts that we believe are most important from the standpoint of investors. In effect, we are attempting to help investors avoid potential pitfalls by successfully navigating the benefits and complexities of portable alpha, available sources of return and their associated risks, related myths and realities, and also the key aspects of implementation. Portable alpha is a powerful investment application—but, just like investing in general, it is not nearly as simple in practice as it may sound in theory.

The asset management industry appears to be engaged in a paradigm shift, prompted by the 2000–2002 equity market sell-off and low bond yields, that is exemplified by but extends well beyond portable alpha and alpha-beta separation. Regardless of the cause, the marked increase in investor demand for and acceptance of new types of risks, tools, and strategies should lend itself to both greater alpha potential and improved diversification of risk. However, the same two rules that have always applied to investing apply in the new paradigm and specifically with portable alpha strategies:

1. It is almost always necessary to take some type of risk in order to generate return over the risk-free rate.
2. The identification, measurement, and diversification of risk is key to optimal investing.

According to Peter Bernstein in an interview about his new book, *Capital Ideas Evolving*, “The central role of risk, if anything, has grown rather than

diminished. We really can't manage returns because we don't know what they're going to be. The only way we can play that game is to decide what kinds of risk we're going to take. Risk is the beginning."¹

Most portable alpha investment strategies are designed to provide attractive returns in addition to the return of the underlying (beta) market exposure. The key question is whether the excess returns are coupled with an acceptable level of risk on a stand-alone basis and also within the context of the overall asset allocation or risk budget in both normal and atypical market environments.

As described in more detail in Chapter 2, portable alpha investment strategies generally obtain market exposure using derivatives contracts like futures or swaps (in some cases combinations of derivatives contracts or similar borrowing/financing arrangements), which do not require payment for the market exposure up front. An investor may be required to provide a relatively modest margin deposit, although rarely more than 5 to 10 percent of the total notional market exposure. This, in turn, leaves an investor's capital available to be invested in a separate, independent investment strategy that—in addition to the beta market return—is designed to generate attractive risk-adjusted excess return, or *alpha*.

Portable alpha applications may be particularly valuable in markets where traditional active management has not resulted in value-added for investors. The same is true in cases where the inherent diversification benefits between combinations of alpha strategies and beta market exposure(s) result in a substantial improvement in the risk/return profile for investors relative to traditional passive or active strategies. The portable alpha investment application can also be employed at the overall investment plan level, in which case there would not necessarily be a one-for-one replacement of traditional managers with portable alpha strategies. Rather, in these cases there might be a fundamental shift in the entire asset allocation, risk budgeting, and manager selection process.

In addition to the overriding themes regarding return, risk, and diversification presented here and throughout the book, some additional key concepts are worth addressing up front—concepts that are central to understanding portable alpha but may be easily overlooked or misunderstood amid all the excitement currently surrounding portable alpha and alpha-beta separation. These concepts include the practice of borrowing to achieve higher returns, leverage, and the confusion surrounding alpha and beta. Following the discussion of these key concepts, we have also included an overview of the specific topics covered in the book, by chapter, with the goal of providing not only the context (the key concepts) but also a road map as we embark on a journey toward our intended destination—a framework for investors to better understand and evaluate portable alpha strategies.

BORROWING TO ACHIEVE HIGHER RETURNS

It is interesting that, with all the focus on portable alpha and alpha-beta separation, it is sometimes assumed that the underlying concepts are entirely new. Certainly the significant development in the derivatives markets and in other financial market borrowing/lending arrangements has made it possible to employ a much greater variety of portable alpha strategies. However, ultimately portable alpha and related concepts like alpha-beta separation are all about borrowing in order to achieve a higher expected return. If you stop and think about it, there is not a single application that falls under this now very broad portable alpha umbrella that does not involve some form of borrowing as the primary means to increase expected returns. Sound familiar?

Modern portfolio theory, as introduced in the middle of the twentieth century, recognized two key factors that are fundamental to the benefits of and construct behind portable alpha:

1. Risk-free borrowing as a means to increase return for investors who have a greater risk tolerance.
2. Diversification as a means to increase return at the same level of risk (or to decrease risk at the same level of return).

The two are highly interrelated in the theoretical world in the following sense: Assuming that a portfolio exists that is identified as the optimal portfolio from an investment efficiency standpoint (that is, a portfolio that involves risk but benefits to the greatest possible degree from diversification and therefore is expected to deliver the maximum return per unit of risk), then every investor should hold that portfolio. However, every investor does not have an identical risk tolerance, for any number of obvious reasons. This is where risk-free lending and borrowing comes into play. If the risk of that *optimal portfolio* is too great, then an investor can mix the risk-free asset and the optimal portfolio in appropriate proportions such that the end result produces the desired level of risk. If the risk of the optimal portfolio is too low, then an investor can borrow (theoretically at the risk-free rate) and purchase more of the optimal portfolio, thereby increasing the return at the same level of return (over the risk-free rate) per unit of risk as that afforded by the optimal portfolio.

The potential benefits of the portable alpha investment application are very closely related to the concept of borrowing at the risk-free rate and also to the power of diversification, even though the application, in practice, is not identical to the underlying investment theory. On one hand, it is possible to gain access to an increasing number of market exposures by borrowing at a money market-based rate (typically LIBOR) as a proxy for

the risk-free rate, simply by obtaining asset exposure via the derivatives markets (futures, swaps, option combinations, even repurchase transactions) or similar arrangements or, most recently, even via products that are structured by broker/dealers to facilitate borrowing on more lenient terms than those typically associated with the swap markets (at a cost, of course!). This means that investors with an appropriate level of risk tolerance can effectively borrow at close to the risk-free rate in order to obtain additional risky asset exposure (more than would be possible in the absence of the ability to borrow) and therefore a higher expected return that is directly related to the additional risk. On the other hand, it is not necessarily true that investors have identified the optimal portfolio to start with, and most certainly not true that it is possible to invest in the optimal portfolio via a simply executed borrowing arrangement.

In truth, the optimal portfolio that exists in theory is not easy to identify in practice. As a result, it actually is possible to increase the returns of an investment portfolio via a borrowing arrangement without a corresponding increase in risk and sometimes without an increase in risk at all—or even a reduction in risk. This is true due to the potential for improvements on two fronts: diversification and alpha—and therein lies the real power of portable alpha.

LEVERAGE—THE GOOD, THE BAD, AND THE UGLY

Portable alpha strategies typically employ the use of derivatives and at least one form (if not multiple forms) of leverage. Therefore it is not surprising that portable alpha strategies, in practice, share many characteristics in common with the use of derivatives and leverage. Both derivatives and leverage can produce powerful risk reduction, return, and other benefits for investors. However, as has been proven far too many times, if investors do not understand and/or do not carefully monitor and disclose the potential risks that may be associated with both leverage and derivatives, the results can be disastrous. The same is true of portable alpha strategies—including strategies that focus on the separation of alpha and beta based on the same underlying concepts.

This brings us to the important concept of leverage, which we focus on repeatedly throughout this book, as leverage is a central underpinning to the portable alpha investment application. Some investors hear the word *leverage*, (or things they associate with leverage, like *derivatives* or *overlays* or *portable alpha*) automatically stop listening and refuse to consider any associated investment strategies, under the assumption that leverage automatically involves substantial risk with the potential for an almost limitless

(or least very significant) downside. By contrast, other investors appear to give very little consideration, if any at all, to the potential downside risk that may be associated with leverage, instead aggressively pursuing strategies and combinations of strategies that effectively stack leverage on top of leverage on top of leverage.

Investing in strategies that involve leverage and then (with the same underlying capital) also employing leverage/borrowing arrangements to obtain additional market exposure (leverage on top of leverage) may actually result in a marked improvement in the risk/return profile of a carefully constructed portfolio. The key is a portfolio that is carefully constructed such that investors and/or fiduciaries have a thorough understanding of all of the underlying risk factors and how those factors relate to one another. This generally necessitates the use of a variety of risk metrics (definitely *not* only volatility-related measures) to gain an understanding of the true downside risk. Unfortunately, this type of diligence is not always employed. In addition, the potential exists for investors without the appropriate tools for accurately assessing the risks to be lured by the high returns that leveraged strategies may provide during good times—only to be sorely disappointed by the associated losses when bad times inevitably come to pass.

The preceding examples of two very different views on leverage bring up a consideration related to governance. Some might argue that the conservative view is one that simply steers clear of investments involving any type of leverage. While this may be the easy way out (the least amount of work), if the goal of investing is to maximize return at a given level of risk or to minimize risk at a given level of return, this is not necessarily the most prudent investment decision, as leverage and derivatives can most assuredly be employed in such a way that these objectives are accomplished. Therefore, refusing to consider any type of leverage might, in a sense, be equated to refusing to either reduce risk or increase the expected return on assets at the same level of risk—hardly a good investment decision!

A relevant corollary may be the assumption that passive indexing is the most conservative approach to investing. This simply is not true if the passive choice actually has more risk and/or greater downside potential than an alternative strategy (such as a portable alpha strategy) that provides the desired market exposure with less downside risk and/or a lower overall risk profile.

For those who think that leverage is necessarily bad, it may be relevant to consider the fact that every individual who owns a home that they have not yet paid for in full (i.e., everyone who has a mortgage) is leveraged. Any corporation with outstanding debt also might be described as leveraged—which means that anyone who owns common stock owns a leveraged investment. Most institutional investors also invest in real estate, where the underlying

investments are leveraged (borrowing is involved)—and so on and so forth. Leverage, in and of itself, is neither fundamentally good nor bad, neither risky nor risk-reducing. As is the case investing more broadly—indeed, many things in life—it all depends.

In reality, just as there is good cholesterol and bad cholesterol, there is good leverage (leverage that reduces risk and/or enhances return at an acceptable level of risk) and there is leverage that, while not necessarily bad, does result in magnified market risk or risk factor exposure that will result in magnified losses in the event of losses on the associated market exposure. To put it in simpler terms, leverage should probably be considered good if it allows an individual (or a unit of capital) to perform more efficiently and effectively than would have been the case without it. In the workplace, as an example, an employee who is able to effectively leverage himself is generally viewed as a highly productive asset to the organization.

However, the downside of leverage might be thought of as too much of one type of risk at the wrong time. Having leveraged exposure to a specific asset or market typically means you have more than 100 percent exposure to that risk factor or set of risk factors. This generally works out great in normal periods or in periods of low or declining risk/volatility. However, it does not work out very well in periods where the downside risk (which may also invoke liquidity risk and financing risk) rears its ugly head.

As with leverage in a broader sense, investors and investment management providers can use the portable alpha application to improve the risk/return profile at the investment strategy level and at the overall investment portfolio level. As such, we are strong advocates of not dismissing the portable alpha investment application simply because there is an element of borrowing that is often equated to leverage. To be very clear, though, many portable alpha investment strategies do involve an increase in risk (as is often the case with leverage) and sometimes a material increase in risk across a number of different dimensions, including but not limited to volatility, tail risk, downside risk, and operational risk.

Interestingly, it is sometimes said that portable alpha and alpha-beta separation enable investors to maintain exposure to the policy portfolio and at the same time increase the aggregate expected return on assets. The potential issue with this statement relates to the idea that policy portfolios are presumably constructed with the goal of achieving an optimal return at an acceptable level of risk. If a portable alpha strategy (or set of portable alpha strategies) is employed that materially increases not only the expected return but also the actual risk profile, does this really mean that the policy portfolio (as it was originally intended and approved) is maintained? It may be true that the market exposures specified by the policy portfolio are all still in place in one form or another (either through outright asset purchases or

through leveraged market exposures), but the policy portfolio has certainly been altered if the aggregate risk is greater than the level of risk specified and acknowledged by those who approved the policy portfolio in the first place.

Portable alpha may provide investors with the opportunity to improve investment results either at the individual strategy level or at the portfolio level. However, investors should most definitely take care to make sure that the end result is not an unintended increase in risk.

THE CONFUSION SURROUNDING ALPHA AND BETA

Part of the confusion among investors when it comes to risk and return in a portable alpha context lies with the increasingly casual and often theoretically incorrect use of the alpha and beta terms in our industry. *Alpha* and *beta* are dependent terms derived from regression equations, as discussed in much more detail in Chapter 5. In an investments context, beta simply measures the sensitivity of a return series to a given factor—for example, the sensitivity of a stock or portfolio of stocks to the return of the stock market. Yet it is now common practice to refer to a given market index or risk factor as “beta,” which makes it all very difficult to follow. Why? Because there are probably an almost endless number of market indexes and risk factors that can be used for purposes of measuring beta.

In addition, the actual beta (or betas, in the case of multifactor regression analysis) associated with a given investment or investment portfolio is wholly dependent on the factor or factors one uses for purposes of analyzing the returns. It is true that modern portfolio theory often references the stock market as a proxy for *the market portfolio* due to the practical reality that the market portfolio cannot readily be specified. However, it does not follow that there is one *beta* (sensitivity to the stock market) and that therefore the returns of all investments that are not explained by beta relative to the stock market are alpha.

To illustrate this point with a relatively simple example, let’s say we measure the beta of a bond index, a commodity index, and a hedge fund composite index relative to a stock market index. What do we find? As shown in Figure 1.1, we find stock market beta in hedge funds, commodities, and even, at times, bonds! Is this surprising? Not necessarily.

What the chart essentially tells us is that during the period under review, hedge fund returns (on average) exhibited a relatively stable and materially positive correlation with equity returns; bond returns exhibited a relatively stable low to negative correlation; and commodity returns exhibited a relatively volatile, mostly positive, and sometimes negative correlation. All three investment categories clearly would have provided diversification

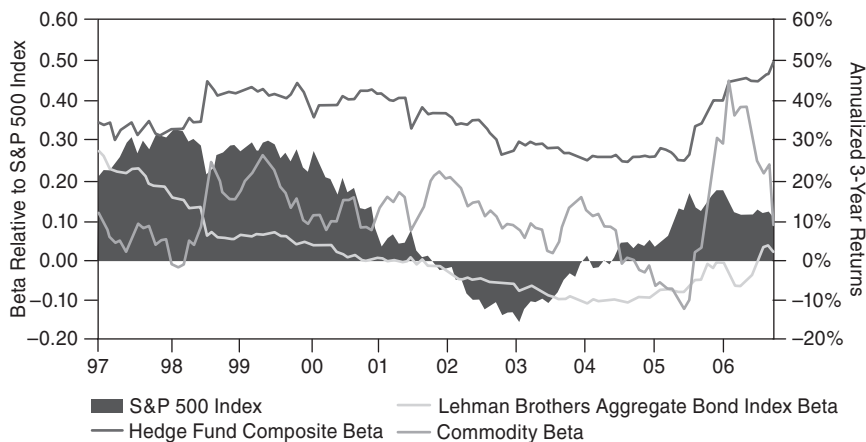


FIGURE 1.1 Rolling Three-Year Returns and Betas versus S&P 500 Index
Data source: PIMCO, Standard & Poor's, Hedge Fund Research Inc., Lehman Brothers, Dow Jones.

benefits relative to equities in a portfolio context. Even though the hedge fund index returns exhibited a materially positive correlation with equities, the correlation was far from 1.0.

But what about the stock market beta? Should it be hedged? The answer: It depends. Hedging the stock market beta (i.e., attempting to remove the market sensitivity exhibited by an investment to a particular risk factor) will most assuredly alter the return profile. The key point is that you can't really describe an investment as a beta or an alpha because most investments exhibit multiple betas (sensitivities) to multiple risk factors. What is most relevant in a portable alpha context is not so much alpha and beta per se but rather the benefits afforded by the diversification of risk factors and also by an active manager's security selection and market timing skill.

Diversification allows an investor to improve his underlying return profile, and portable alpha allows investors to increase the diversification benefits at the investment strategy and portfolio level by seeking alpha from sources and managers that are independent from the desired market exposure or market benchmark. We can (and in fact do in Chapter 5) look across a wide variety of different combinations of market risk factors (inherent in different market indexes and hedge fund styles) and measure the correlations among those risk factors. This type of historical insight, together with a deep understanding of manager skill, the strategies employed, variation in risk factor exposure, and maximum risk/risk factor exposure employed in a particular investment strategy, can be very helpful in putting together

a portable alpha strategy that may be reasonably expected to result in an improved risk/return profile. However, it is very dangerous to assume that a strategy that has been designated as an alpha strategy will not result in a material increase in risk or even a fundamental alteration to the desired asset class exposure when coupled with a given beta market exposure.

All investment strategies that provide a material return over cash are also likely to involve material additional risk of some type, regardless of whether an investor or provider chooses to describe the risk or risk factors as betas. In some cases the primary risk factors are easier to identify than in others, but even so, as we show in the correlation charts toward the end of Chapter 5, most investments do exhibit measurable relationships with other investments (betas). Alpha is also only independent from the factor that is used to measure the associated beta. You cannot hedge the factor exposure and then expect the resulting return pattern to be uncorrelated with the remaining universe of other possible factor exposures, as is sometimes implied or even stated outright in presentations on portable alpha. Alpha and beta are, by definition, dependent terms. Nonetheless, the underlying concept still makes a great deal of sense due to the inherent potential diversification and associated risk/return improvements that can be achieved by combining an independent alpha source with a desired market exposure. At the end of the day, that is what it is all about!

PORTABLE ALPHA DEFINITIONS AND TRENDS

Portable alpha definitions and associated terminology can vary substantially depending on the person providing the explanation. This certainly keeps things interesting but, unfortunately, may also ultimately lead to confusion among investors. The goal of Chapter 2 is to provide an overview of the portable alpha investment application (as it is most broadly defined), including the derivatives-based beta market exposure and the investment strategy, or alpha engine, in which capital is invested. The primary benefits of *porting* alpha are highlighted, along with examples of portable alpha strategies and the original development of the concept. The chapter also addresses some of the common misperceptions surrounding portable alpha and the evolution of portable alpha strategies over time, including somewhat recent events that have spawned a flurry of interest in the concept and related applications.

A key overriding theme in the discussion of portable alpha definitions and trends—and in the entire book—is the importance that investors not lose sight of the potential for a material increase in risk in addition to the potential for attractive incremental return. After all, beyond all the excitement that currently surrounds portable alpha, investors are still held to the

fundamental underpinnings of prudent investment management. The goal of maximizing return on capital invested can only be accomplished with very careful consideration of downside risks.

BACK TO THE BASICS: INVESTMENTS 101

Chapter 3 reviews the fundamentals of investing and modern portfolio theory that are particularly relevant as background for the portable alpha investment application. These basics include the construction of an optimal investment portfolio; utility functions and risk aversion; portfolio selection and the efficient frontier; the capital market line, including related risk-free borrowing and lending; the capital asset pricing model (CAPM) and factor models—all with a focus on the benefits of diversification.

The chapter also addresses the concept of risk premiums, and examines relevant differences between theory and reality, including the risk-free reference point, the market portfolio, market efficiency, the assumption of normally distributed returns, and the potential for a mismatch between the incentives of investors and investment managers. In addition, both option pricing and merger arbitrage strategies are reviewed in the appendixes to provide a basis for unstanding nonlinear return distributions. As innovative and new as many deem the portable alpha and alpha-beta separation concept, it is remarkable just how much of the underlying investment theory is best explained by some of the principles that were introduced almost half a century ago and are still as relevant today as ever.

ASSET ALLOCATION AND PORTABLE ALPHA

The fourth chapter switches to a focus on asset allocation and key related ideas, all of which are relevant as a basis to considering different portable alpha applications. An emphasis is placed on the lack of diversification in typical institutional investor asset allocations, and suggestions are put forth for improving portfolio level efficiency through diversification, a careful search for alpha, and a disciplined approach to managing asset allocations. Portable alpha implementation at the strategy and portfolio level is reviewed as a potential solution for improving investment returns and an important development in asset management. Challenges associated with volatility and correlation measures are addressed, as is the need for a much greater focus on sustainable spending as an investment objective. Equity risk premiums are specifically analyzed given the dominance of equity risk in most investment

portfolios, and examples are put forth as to how investors can benefit from some of the preceding ideas and concepts.

Finally, investors and fiduciaries are encouraged to be open to new approaches to asset allocation, risk budgeting, portfolio benchmarking, and investing in general, including portable alpha approaches, that may involve a move away from the classic models. While such departures from the traditional may be met with hesitation, the benefits that are likely to accrue to long-term investors are compelling and should most certainly be considered.

ALPHA, BETA, AND ALPHA-BETA SEPARATION

Chapter 5 focuses on providing clarification with respect to the terms *alpha* and *beta*, which are often used in a context that may prove particularly problematic in a portable alpha and alpha-beta separation framework. Alpha and beta are defined as a basis for helping investors separate themselves from the marketing-oriented use of the terms today, especially as it relates to understanding the risk and return characteristics of portable alpha strategies. Example alpha and beta calculations are provided to illuminate the difference between alpha and excess return, and key potential issues with the separation of the alpha and beta are highlighted. The fundamental challenges to achieving a desirable level of alpha by independently selecting alpha and beta are addressed, including the interdependence of the two, difficulties in identifying alpha, and the complexities and associated costs and fees. Two different case studies are presented to help illustrate important points together with asset allocation and risk budgeting considerations. Benchmarking is also discussed, as is the existence of multiple betas in most types of investment strategies.

Alpha and beta are undeniably useful terms in the world of active investment management. However, they are rendered meaningless if a proper benchmark that reflects the primary risk factors of the associated investment strategy is not identified for purposes of calculating the alpha and beta (or betas). Even then, true alpha may still be elusive.

GLOBAL SOURCES OF PORTABLE ALPHA, ASSOCIATED RISKS, AND ACTIVE MANAGEMENT

One of the primary benefits of the portable alpha investment application is the almost limitless choice of risk factors and investment strategies that investors can access to outperform a money market (cash) rate and therefore to provide incremental return in a portable alpha context. However, as

discussed in the sixth chapter, it is imperative that investors do not evaluate alpha strategies in a vacuum, as the capital invested in a portable alpha strategy is exposed to the risk factors that are inherent in both the alpha strategy and the derivatives-based beta exposure. Therefore, it is critical for investors to have a reasonably thorough understanding of the primary risk factors and risk factor ranges in each component, in addition to understanding the potential value-added that may accrue to investors as a result of tactical risk factor allocation and security selection. Fortunately, however, the expected returns from most strategies can be deconstructed in this way.

To this end, the primary strategies and associated risk factors that are currently employed as alpha sources are reviewed, including equity, fixed income, and different styles of hedge funds, together with the associated primary risk factors and the potential value of skilled active management. An entire section is also dedicated to exploring the additional value-added that may be associated with the global marketplace, using representative fixed-income and currency strategies for purposes of illustrating the key points. Common risk premiums across different strategies are highlighted, as is multifactor regression analysis as one means to help investors assess underlying risk factors when a representative investment benchmark is not readily identified.

Finally, a common base line is presented for purposes of evaluating potential alpha sources with a focus on (1) key characteristics and benefits, (2) sources of return associated risk factors, and (3) the relationship between the primary risk factors and the risk factors inherent in the derivatives-based beta market exposure.

DERIVATIVES-BASED BETA MANAGEMENT

Derivative instruments are the building blocks for portable alpha strategies and therefore a key ingredient to successful portable alpha implementation. In the seventh chapter our goal is to provide a good sense of the risks, costs and complexities associated with maintaining beta market exposure using derivatives. It is important to note that, in the most basic sense, derivatives represent a borrowing arrangement not entirely different from securities lending, as one example. As such, we explore this analogy as a means to better understanding the fundamentals behind derivatives-based beta management. The futures and swaps markets are reviewed before addressing the importance of skill when it comes to executing and maintaining derivatives positions, particularly during periods of market stress. Examples are given to illustrate the preceding points, and associated operational risks are also addressed.

The overriding message in this chapter is that derivatives management is not simple, and it should not be free, as has been suggested. Rather, there are any number of important considerations that are entirely relevant for investors to carefully evaluate in a portable alpha context. Derivatives are a very important tool—however, as is always the case with levered market exposure, not one that should be taken lightly.

PORTABLE ALPHA IMPLEMENTATION

The number of different implementation options for portable alpha strategies available to investors continues to grow, which is definitely a positive development, although it can be difficult to navigate the associated complexities, costs, and fees. In Chapter 8 we provide investors with a framework to help break down the various approaches into different components or elements including (1) the alpha strategy investment; (2) the beta derivatives exposure; (3) liquidity to meet margin or collateral calls associated with the derivatives-based beta exposure; and (4) consolidated risk management, risk monitoring, and reporting.

In addition, we describe the three basic approaches to portable alpha implementation: the fully integrated approach, the completely segregated approach, and something in between which we call *semibundled*. The advantages and potential disadvantages of each approach are addressed, together with an explanation of how each of the elements or components associated with portable alpha strategies may be implemented in practice. A case study is also presented to help illustrate some of the inherent complexities and downside risk that can be associated with portable alpha strategies. Portable alpha implementation is not simple. However, it is certainly possible for investors to deconstruct almost any approach into each of the key elements as a means to better understand the costs and risks, in addition to the benefits.

THE REAL HOLY GRAIL: RISK MEASUREMENT AND MANAGEMENT

Chapter 9 covers risk measurement and management, which may be critically important given the inherently levered nature of portable alpha strategies and other associated complexities. We emphasize the importance of understanding and controlling the risk factors that drive the performance and downside risk of both the alpha and the beta components. We also address the shortcomings of different statistical risk measurement tools that

are based on the assumption of normally distributed returns and/or that ignore the risks that a portable alpha strategy or program may face in periods of crisis.

In addition, we explore recent work by Harry Markowitz on the use of CAPM in the real world, plus extensions of this analysis, looking at the dynamic impact of leveraging on the market portfolio, the pricing of risk, security prices, and including the potential for a destabilizing outcome. A detailed analysis of stress testing is put forth as a risk measurement tool that may be particularly relevant for portable alpha investment applications, in addition to a thorough understanding of the tails of return distributions—and ultimately *just using good common sense*.

LIABILITY-DRIVEN INVESTING

While certainly not relevant for all investors, liability-driven investing (LDI) is right up there with portable alpha in terms of not only the number of conferences dedicated to the topic but also the number of investors who are focused on the potential benefits of such an approach. In many ways the two topics are actually interrelated, given the fact that many of the LDI approaches involve a component (duration *overlays*) that by most measures falls into the broad category of portable alpha. Of course, with LDI, the primary focus is specifically related to liability hedging and reducing balance sheet volatility as opposed to an improved return profile. That said, the ultimate goal is to reduce risk (relative to liabilities) at a given level of expected (asset) return and is therefore not entirely different from portable alpha strategies more broadly.

Chapter 10 provides an overview of LDI, including the landscape, objectives, and key examples, tying in the relevance of the portable alpha investment application as appropriate. While both concepts may represent important shifts in focus by investors, the ultimate goal is apparent: better security for plan participants and a better ability to weather future market storms.

PORTABLE ALPHA THEORY AND PRACTICE: WRAPPING IT UP

Chapter 11 summarizes the central themes and concepts presented throughout the book, including the reasons why we feel that the time, energy, and effort required to truly understand and evaluate portable alpha investment applications, sources of return and risk, and different approaches to portable alpha implementation is likely to be a worthwhile endeavor.