CHAPTER 1

Indexing *Is* Active

The Meaning of *Active Indexing* and the Interconnected Themes of the Book

Steven A. Schoenfeld

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THE IMPACT OF INDEXING

This chapter provides an overview of the key themes and topics of *Active Index Investing*. Its purpose is to help the reader gain a better understanding of the multiple dimensions of indexing, which are then explored comprehensively in the rest of the book.

The impact of index investing has gone well beyond index-based portfolios; its transparency and efficiency have dramatically changed the investment landscape. Benchmarks have moved from being theoretical constructs to become truly transparent and efficient investment alternatives. What better method of measuring active manager performance could be devised than a yardstick for asset class exposure? Index-based portfolios have shone a bright light on the value added (or lack of value added) by managers who were charging active fees yet hugging their benchmarks—a practice known as "closet indexing."

The lower costs of index funds brought new transparency and focus on trading costs for all institutional investment vehicles. Institutional investors have saved enormous sums in the first quarter century of indexing.[1] This also led to the growth of new products and new techniques for adding value to the investment process. Among the most notable are portfolio trading, securities lending, and structured transition trades.

The same focus on efficiency of exposure and risk management led to the development of stock index futures and options. And the development

of exchange-traded funds (ETFs), which started as an evolved blend of the techniques of both portfolio trading and index derivatives, has extended the benefits of indexing to a huge new group of potential users. Furthermore, ETFs, unlike previous index vehicles such as index mutual funds, are appropriate and efficient for both institutions and individual investors: The participation of one type of user does not disadvantage the other. Finally, although indexing started with equities, it has expanded into most other asset classes and virtually every equity market in the world.

The growth and development of indexing has been both a theoretical and practical financial revolution, and it is steadily advancing. Thus, it is important to understand the fundamentals of indexing, as well as the products and their varied uses. This knowledge will help the reader recognize just how dynamic the field is and why indexing truly is active.

This chapter starts the journey by first explaining the book's title—*Active Index Investing*—with a description of the three ways in which indexing is anything but passive. The second part of the chapter provides a broad overview of the core themes and information in Parts One through Five of the book.

WHAT DOES ACTIVE INDEXING MEAN?

Index-based products are commonly referred to as passive, which implies a static, even boring, approach to the market. Although Chapters 2 through 4 demonstrate how this "passivity" can actually deliver better long-term investment performance, many investment professionals secretly suspect that indexing is a lazy man's game. They perceive it as a cop-out that somehow means "leaving something on the table"—in this case, the potential for outperformance. This has led to decades of debate between proponents of active management versus believers in indexed approaches. In fact, some of the early opponents of indexing called it "un-American" and "guaranteed mediocrity." To which Nobel Laureate Paul Samuelson replied, "People say that you're settling for mediocrity [with indexing]. Isn't it interesting that the best brains on Wall Street can't achieve mediocrity?"

This book *will not* engage in that debate. As Chapter 3 indicates, for sophisticated investors, this debate is over, and the conclusion is both simple and elegant. What maximizes the efficiency of an overall portfolio is not "index versus active," but instead, a combination of both approaches. This book shows the reader how smart cost- and risk-sensitive investors use the power of indexing to maximize portfolio performance and minimize risk.

As noted in the Preface, the term *active indexing* is most decidedly *not* an oxymoron. It can describe the active nature of managing index-based

portfolios, and it also can describe a philosophy or approach that uses index-based tools in creative (decidedly nonpassive) ways to change the risk/return profile of an investment. It can mean many different things to different market participants, but I define it in three basic ways that reflect a high degree of activeness (the key phrases are in italics):

1. *Benchmark construction and selection is active.* The choice of benchmarks (for indexing and for asset allocation and performance measurement) involves substantial active decision making. In using index strategies, investors make important, active decisions about strategic benchmarks, weightings, and rebalancing of asset allocations. Even when using exclusively active managers, the choice of benchmark for the manager—and for the asset class within the overall portfolio—greatly influences the investment outcome. The index industry is dynamic, with continual development and refinement of both benchmarks and the index products linked to them. As more products are launched, and as indexing expands to virtually every asset class, the need for investors to make informed decisions on benchmarks will only grow. Asset owners cannot be passive about the benchmark decision.

   Part Two of the book provides background on benchmarks. It includes the discussion and analysis of the benchmarks that are available to investors, the different metrics for assessing indexes that demonstrate the activeness of this decision process, and the need for independent analysis.

   Part Three of the book provides an overview of the huge variety of index-based products and strategies and how they are developed and used. Readers will see how active the innovation and creativity of the financial community can be when applied to indexing.
2. *Managing index funds is active.* Managing index-based portfolios is an extremely active process. Because tracking benchmark indexes requires a high investment quotient (IQ), index portfolio managers often have more insight into market microstructure—trading, operational constraints, liquidity, corporate actions—than most traditional active investors.

   Part Four of the book focuses on this little-understood dimension of index-based investment. Readers will likely be amazed at the degree of effort and skill needed to manage portfolios that accurately track equity and fixed-income indexes.
3. *The use of index products can be as active as the investor wants it to be.* Active and sophisticated decision making by investors undergirds their use of index-based products and strategies. Investors who choose an index-based approach in no way abdicate the quest for outperformance. In fact, integrating indexing and enhanced indexing within a total portfolio approach to risk budgeting allows them to better segment the beta or market

exposure from their sources of alpha or excess return.[2] Determining the right index products and optimal proportion of allocation to index-based strategies is a vital decision. Using appropriate indexing approaches can be one of the most important ways to achieve outperformance.

In Part Five, sophisticated investors illustrate how index products and strategies can help manage risk, minimize costs, and maximize performance in the only way that matters—relative to the risk taken.[3]

By the end of the book, the reader will understand all these definitions of active indexing and will have one or more favorite examples for each of the preceding meanings.

Although the issues of index-based portfolio construction differ greatly from the decisions and products of traditional active management, its dimensions are all active—there is nothing passive about them.

ACTIVE DECISIONS IN INDEXING—TOUGH CHOICES, LIMITLESS CREATIVITY

The myriad choices of benchmarks, allocation schemes, and methods of rebalancing can seem overwhelming. These diverse and multiple options reflect the continual evolution of both index products and the theories behind them.

This complexity and the many nuances highlight the activeness of every indexing decision. The use of index products and strategies almost always has an active element, and often, index-based products are the most efficient way to maximize return and minimize risk.

As active benchmark decisions are not explicitly discussed in subsequent chapters, a short description follows here. Further explanation of the actual implementation of alternative benchmark structures can be found in Chapters 14 and 18.

Indexing started as a way to achieve diversified, transparent, efficient core exposure to asset classes—initially domestic equity, and then international and global equity and fixed income. But indexing has evolved in many active ways; among the most interesting is the blending of index benchmarks and tools with various levels of active decisions. This phenomenon developed through the interaction and debate of many players: academics (discussed in Part One), index providers, consultants, fund managers, and asset owners.

Index benchmarks have numerous differences—investors need to understand the methodologies before making decisions. And as ETFs penetrate further into the retail marketplace, this need will become more pressing.

Choosing benchmarks and investment strategies will become increasingly complex. Parts Two and Three of the book describe many nuances involved with these choices and explore ways to build portfolios on them. The

following short list shows some of the choices that investors face in determining appropriate benchmarks (standard or custom) and the investment strategies linked to them:

- Reliance on known quantities—use of name brand indexes.
- Alternative weights, both within markets and across markets.
- Country inclusions/exclusions for investment or policy reasons.
- Sectors/industries (subsectors).
- Size/capitalization range.
- Style and style rotation.
- Screened portfolios, whether for social policy or investment prudence (e.g., bankruptcy/value, corporate governance).

To visually portray the array of choices, Table 1.1 summarizes the range of size, style, sector, and country coverage of the major global index families. And each of these factors can be custom implemented—using alternative weights or excluding certain characteristics—either as a benchmark or within an index strategy. Each subindex can also be used to complete an investor's existing allocations, a strategy that is discussed in Chapter 18. Index providers and index fund/ETF managers will continue to innovate, and thus, this list might be obsolete relatively soon. IndexUniverse.com provides news and updates on benchmarks and index products.

Table 1.1 excludes highly popular domestic U.S. benchmarks such as Russell or Wilshire Indexes (all of which are discussed in Part Two, and are thoroughly covered in the Index Research section of www.IndexUniverse.com.

TABLE 1.1 Array of Choices in Standard and Custom Indexes

	Cap Range (Size)	Style (Value/Growth)	Sectors	Market Coverage	Specialized/ Screened
Dow Jones	L/M/S/total	V/"Neutral"/G	10	>30	Sustainability, Islamic, custom
FTSE	L/M/S/total	V/G	10	>45	Socially responsible, custom
MSCI	L/M/S/total	V/G	10	>45	Custom
S&P	L/M/S/total	V/G	10	>45	Custom

Note: L = Large cap; M = Mid cap; S = Small cap; V = Value; G = Growth. "Neutral" is also commonly referred to as "core." Market Coverage is the number of stock markets that the index series includes in both data and broadest "multi-market" index.

Once investors have chosen an alternative or customized benchmark, they face major rebalancing choices:

- *Rebalancing approaches within strategy.* For example, there are different types and frequencies of calendar-based approaches (trigger bands) that seek to capture mean reversion between sectors and/or countries.
- *Rebalancing/funding approaches between asset classes strategies.* This total portfolio perspective can use investor cash flows to rebalance between and among asset classes—domestic and international equities, fixed income, real estate securities, and others. Using new funding to rebalance with index products can be a highly efficient way to achieve the long-term benefits of multi-asset class index or index and active strategies. This approach is discussed in Chapter 28 and in more detail in Chapter 30.

  Working alone, or with their asset managers or financial advisor, investors have virtually limitless opportunities for creative solutions, with transparent, cost-effective, and efficient investment vehicles. Furthermore, even the most heavily customized indexing strategy can share in the liquidity pool of other index portfolios. Whether trading a publicly listed vehicle that benefits from institutional participation or working within an institutional product structure, index-based approaches benefit from the two-way activity flow of various users. Many times, this activity can facilitate cross-trading between large index investors trading in the opposite directions.[4]

  This short discussion illustrates the limitless variations around an indexing approach. Whether a portfolio is 100 percent index-based, or a blend of index or active, there are many important choices in benchmark selection and implementation—some of them highly complex. This is a key element in the definition of the term *active index investing.*

THE INTERCONNECTED THEMES OF PARTS ONE THROUGH FIVE

The book is divided into five parts—which as mentioned in the Preface could have each been a stand-alone book. Clearly, purchasers of the book have "made a good trade." The five parts are as follows:

Part One: The Indexing Revolution: Theory and Practice.
Part Two: Benchmarks: The Foundation for Indexing.
Part Three: The Ever-Expanding Variety and Flexibility of Index Products.

Part Four: Managing Index Funds: It's Anything but Passive!
Part Five: Pulling It All Together: How to Use Index Products to Build an Efficient, Risk-Controlled Investment Strategy.

Throughout, the book highlights the myths and misperceptions about indexing and provides insight into the core benefits of index-based strategies.

The theory behind indexing evolved largely from the study of equity markets, which tends to give this book an "equity-centric" focus. It does, however, cover most other major asset classes; more important, the core theories that underlie equity indexing are equally relevant for other asset classes, including fixed income, real estate, and commodities. Part One provides a comprehensive overview of the foundations and principles of indexing, including a consolidation of the theoretical and business history of indexing. Contributors explore the enduring logic and accelerating sophistication of indexing and tackle the critics of indexing with solid empirical data and numerous real-world examples.

The detailed presentation of benchmarks in Part Two shows how indexes are the foundation for almost all investment activity. The nuances of index construction and maintenance methodology are described as well as the seven key criteria for choosing the right benchmark index for specific investing needs. This decision is an *active* choice that has significance, regardless of whether the investments are in index funds or in active funds benchmarked to an index.

Part Two starts with a focus on equity indexes, but its scope broadens to include most major asset classes and areas of investment. Investors building multiple asset class portfolios rely on benchmarks when performing asset allocation studies that determine their commitment to various categories of assets. Again the reader will see how and why the benchmark decision is an active one, and why it matters so much.

In Part Three, the focus shifts to an overview of the ever-growing range of index-based investment products. Indexing has shaken up sleepy corners of the investment industry by bringing transparency and accountability to investment managers. Through three decades, innovative index product development has been a source of disruptive technology that serves the greater good of asset owners. And while the process started with equity markets, it is rapidly spreading to all major investable asset classes, including alternative investments such as real estate and hedge funds.

The purpose of Part Three is to define and highlight the broad categories of index products—funds, derivatives, ETFs, and so on—and the asset classes that they track. An effort is made to cover global trends and developments, even though this book retains a North American investor's perspective.

From the outset, the book makes no effort to be all-inclusive. This would have been virtually impossible. The largest institutional index fund management firms track hundreds of benchmarks for more than a thousand clients, and although retail index mutual funds may have fewer variants, they still have large fund families. ETFs are somewhere in between. But more critically, the product sets are always evolving, and thus this part of the book depicts the scope and scale of index-based products. It highlights some particularly interesting product and strategy types, such as ETFs, enhanced indexing, and the indexing of alternative asset classes. Chapter 18 delves deep into the ways that index products can be used to facilitate sophisticated strategies—what I call *active indexing*.

Part Four focuses on the art and science of managing index-based portfolios. It provides an insider's perspective of the techniques and challenges in building and maintaining index funds, ETFs, and custom index-based portfolios. It also demonstrates that this craft is certainly "anything but passive." The six chapters in Part Four all were written by current or former index portfolio managers. The subject matter covers the major asset classes and product types including U.S. and international equities, fixed-income, ETFs, and index-based separate accounts.

As far as I know—and I asked a lot of people before embarking on this project—there has never before been such a detailed and comprehensive exploration of the index portfolio management investment process. The contributors have provided robust examples and even some entertaining war stories from the front lines of the battle to minimize costs and maximize tracking. Topics include index construction methodology, client needs and motivations, the underlying market microstructure, trading and transaction costs, and macroeconomic and other market-moving forces.

Part Five, the final section, is an exploration of why and how sophisticated investors use index-based products to minimize costs and risks, and maximize portfolio performance. In these seven chapters and six sidebars, readers see the perspective of large public institutional investors, financial advisors, and authors writing from the individual investor's viewpoint. In what may prove to be the most valuable part of the book for some readers, the contributors provide numerous real-world examples of indexing for asset allocation, risk budgeting, and tax minimization. They also describe the key factors that plan sponsors and their consultants should use when choosing index-based instruments.

Speaking for the needs of individual investors, two former U.S. Treasury Department officials who have fully explored the traps that most mutual fund investors fall into propose a better—indexed—way to achieve better long-term results for savings and/or retirement.

Part Five also proposes a universal investment philosophy that is relevant for institutions, financial advisors, and individual investors—what I call *indexing at the core*; and this section and the book conclude with an opinionated projection of the future of indexing. Not surprisingly, the chapter envisages the probability of continued expansion and democratization of index-based products and strategies.

ON TO THE REVOLUTION

After reading this overview, you should have a better sense of the three definitions of active indexing; active benchmark choice, the active process of managing index portfolios, and the active use of index products for everything from broad-based asset allocation to short-term tactical trading.

Investors should keep this multifaceted concept in mind when consulting the five parts of the book—in whatever order makes the most sense to them. Each one covers material that could have been a book in itself, and there are numerous cross-references to related chapters throughout. As befits a dynamic, rapidly growing industry, the editor and contributors will endeavor to update chapters of the book in the "E-ppendix," which is hosted on and supplemented by other features and data on www.IndexUniverse.com.

We now move into Part One of the book, which documents the efforts of then-radical academics and investment professionals who began this revolution. Their theories and innovations continue to drive the inexorable advance of index investing even today. Chapter 2 provides insight into the "profound, positive, and permanent" revolutionary effect of indexing introduced by Don Phillips in the Foreword. The subsequent chapters show how the industry has built on those foundations to continually develop products and strategies "that have given investors greater control in managing risk, return, and cost in their portfolios."

NOTES

1. In a study conducted in 1998, "25 Years of Indexing: An Analysis of the Costs and Benefits" by PricewaterhouseCoopers, and commissioned by Barclays Global Investors, the authors estimated that the total savings for U.S. institutional tax-exempt investors ranged between $81 billion and $105 billion since the launch of the first cap-weighted index fund in 1973. These savings include transaction costs, management fees, and the performance difference between index and active strategies. They similarly estimated that the then "current" annual savings are between $14 billion and $18 billion (p. 27).

2. These terms are fully explained in subsequent chapters, particularly in Chapters 2 and 14.
3. Return relative to risk incurred is generally measured as an information ratio. This measure is defined and discussed in Chapters 14 and 15.
4. Crossing—which saves enormous amounts of money for institutional index fund clients—is discussed in Parts Four and Five of the book.