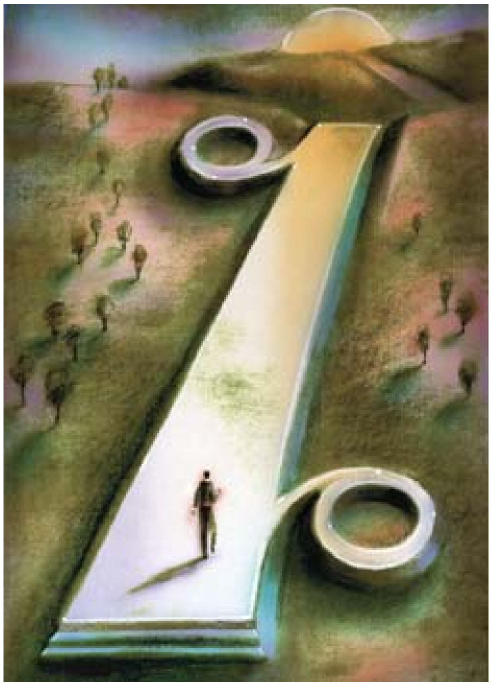
Viewpoints
WINTER 2005 NORTHERN TRUST GLOBAL INVESTMENTS



Anything But Passive

The California Public Employees Retirement System (CalPERS) made industry headlines again last month for its ongoing move to separate alpha and beta drivers in its $170 billion investment portfolio. Chief investment officer Mark Anson has been focusing for several years on using index and enhanced index strategies for beta exposure, while adding diverse alternative investments — like the recently proposed $1 billion allocation to risk-adjusted absolute return strategies — for alpha generation.*

Indeed, institutional investors of all types have been taking a closer look at the role indexing and enhanced indexing should play in their portfolios. The lower cost and greater efficiency of index strategies often trump the higher fees and sometimes inconsistent performance of long-only active managers, fueling the alpha-beta separation trend and increased use of index managers for pure market exposure.

In fact, recent industry reports show that the largest U.S. institutional investors allocated more than $2.6 trillion to U.S. index portfolios at mid-year, up nearly $1 trillion over the year earlier.

"In working with more than 60 institutional clients across the U.S., we find that indexing often has a place in portfolios, especially those with $500 million or more," notes Kathleen C. Taylor, CFA, senior vice president and principal of LCG Associates, based in Atlanta. "However, we've also found that some smaller clients prefer the lower tracking error of indexing, and that the decision to index is not based on size alone."

The largest U.S. institutional investors allocated more than $2.6 trillion to U.S. index portfolios, up nearly $1 trillion over the year earlier.

As consultants and other sophisticated market watchers know, the world of indexing

Please Turn to the Back Page

Northern Trust

Everything You Ever Wanted To Know About Index Investing...*

An interview with Steven A. Schoenfeld, chief investment strategist for Northern Trust's Global Quantitative Management group.

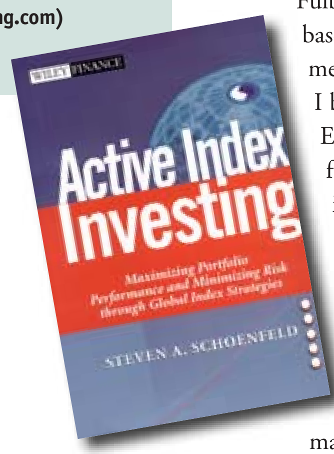
Among Steven's many contributions to the institutional investment community, perhaps his most significant to date has been the publication of his most recent book, Active Index Investing, (Wiley Finance, 2004). The book's 31 chapters capture in-depth insights and practical advice from over fifty leading practitioners from all spheres of the indexing world. It has been hailed as the definitive guide to indexing, explaining how the world's most sophisticated investors use index-based strategies to enhance performance, reduce costs and minimize the risks of global investing.

"Indexing is anything but passive," says Steven A. Schoenfeld, Northern Trust's chief investment strategist for quantitative management.

Q Before we talk about the book, let's talk about your background. What sparked your interest in indexing?

During and right after college in the mid 1980s, I worked for a hedge fund that was using the new S&P 500 index futures for market exposure. I spent time in Chicago at the Mercantile Exchange learning how these vehicles traded. That initial experience led to my Fulbright scholarship in Singapore, which was based on my proposal to research the development of futures markets in Asia. While there I became a member of the Singapore Exchange and traded Japanese stock index futures in the "pits". Naturally, this all involved a significant amount of research and writing on the topic, which led to my first book, The Pacific Rim Futures and Options Markets. After graduate school, I worked for the International Finance Corporation/World Bank, developing some of the first emerging market index products, which deepened my appreciation for the importance of appropriate benchmarks and the value of indexing even for less-efficient markets.

"Maximizing portfolio performance and minimizing risk through global index strategies" (For additional information, please visit www.ActiveIndexInvesting.com)



Q. What was the catalyst for the book?

The initial motivation came during my early years as an investment strategist and institutional index manager. My colleagues and I were diligently capturing every basis point for our clients, providing detailed advice on benchmark selection and overall investment policy, solving complex investment problems, and at the same time, interfacing with and advising all the major index providers, and launching new investment products. Yet indexing continued to be viewed as a passive process when, in fact, it was anything but! The specific catalyst came in early 2001 when an editor at Wiley approached me with a proposal for a book on indexing. After initially hesitating, I spoke with many colleagues in the industry — other portfolio managers, plan sponsors, institutional brokers, index providers and exchanges — and there was almost universal agreement that there was a need for such a book. Additionally, many of the people who were most supportive of the idea agreed to contribute to the book — and so the book project began.

Q. You spent three years working on the book, which was clearly a labor of love. Tell us about that process.

It started with passion for the topic and lots of moral support from friends and colleagues in the industry. Plus many weekends, evenings and eventually, an unpaid leave of absence as I realized that the book required even greater depth and scope than I had originally planned. Actually, after I left my position at BGI, I was then able to include several key contributions from people who had formerly been competitors. This gave me the opportunity to add the perspective from more industry professionals and thus make the book a more complete and balanced work than it might have been otherwise.

Q. In the book, you point out that the active versus passive debate is over, and that most sophisticated investors use a combination of both approaches. In this framework, what is the role of indexing?

Indexing offers efficiencies that are of value in all market environments and for all major asset classes. The most recognized benefits, naturally, are lower management fees, lower tracking error versus policy benchmark and reduced transaction costs. But index based strategies have become increasingly embraced for their efficient delivery of market returns with a highly-transparent process and precise asset class exposure. So effectively, indexing can serve as the core of program, in risk budgeting to build the appropriate manager/fund structure and to plug risk holes and in manager and allocation transitions.

Q. What are the most important trends today among institutional investors, and where does indexing fit in?

Perhaps the most important trend is the movement toward separating beta and alpha, which we believe will expose the inefficiency of using numerous traditional active managers to gain desired market exposure, when in fact, the managers are hugging the benchmarks. The institutional world is shifting toward greater use of index and enhanced index funds to capture market beta in almost every asset class — well beyond large-cap U.S. equities to encompass small- and mid-cap, U.S. and global fixed income exposure and both developed and emerging market international equities. Alpha is increasingly sought through market-neutral and other absolute return strategies.

Q. So we're really looking at a new investment paradigm?

Exactly. The new paradigm is a blend of index, enhanced index, risk-controlled active, traditional active and absolute return strategies—with index-based strategies and vehicles at the core. Furthermore, we are seeing continual innovations in indexing, including better benchmarks, new variants of enhanced index strategies, alternatives to cap weighting which we call quasi-active indexes — and, benchmarks which aim to "index" alternative asset classes such as real estate, commodities and even hedge funds.

Q. Who do you think would benefit most from reading the book?

There are three primary audiences for the book: Industry participants (plan sponsors, investment managers, trustees, consultants, exchange officials, index providers and broker-dealers), academia (primarily graduate schools of business) and sophisticated self-directed individual investors.

Q. On a more personal note, you are donating all of your proceeds from the book to several charities established for relief of terror victims around the world. What motivated you to make such a generous decision?

As a native New Yorker who lived in Washington DC for seven years, the terrorist attacks on the U.S. on September 11, 2001 affected me enormously. I signed the book contract in New York, in late August, 2001, and subsequently worked on the book in Israel, while there on a consulting project. A contributor to the book lived in Spain during the time of the Madrid train attacks, and a close friend narrowly escaped two terror attacks in Jakarta. Thus, throughout the development of the book, I felt the ever-present backdrop of the threat of terrorism, saw the horror of its random violence, and empathized with the tragedy of the loss of so many innocent victims and those who survived them, often with both physical and psychological wounds. So when it came time to dedicate the book, I felt that the memory of these victims around the world was only appropriate, and that charities that support the survivors and their families should receive my royalty proceeds.

**Burton G. Malkiel, Professor of Economics, Princeton University and author of A Random Walk Down Wall Street, in his description of the book Active Index Investing by Steven A. Schoenfeld*

LETTER FROM THE PRESIDENT

Terry Toth

DEAR CLIENT:

In my ongoing discussions with institutional clients, the focus on separating alpha and beta drivers has never been greater. Industry statistics clearly illustrate the shift, as worldwide passive assets topped $3.5 trillion earlier this year and alternatives of all types are experiencing significant growth. We continue to support this strategic shift by offering a full range of global index and enhanced index programs, as well as a growing array of alternative investments. And relatedly, we continue to focus on expanding the thought leadership we offer. This issue highlights our views on the most sophisticated approaches to enhancing portfolio performance, reducing costs and minimizing the risks of global investing. We hope you find it informative.

On behalf of the entire Northern Trust team, I extend our best wishes to you and your families in the new year.

Warmest Regards,

TERRY TOTH

President, Northern Trust Global Investments

Viewpoints
NORTHERN TRUST
GLOBAL INVESTMENTS

Northern Trust Global Investments is a multi-asset class investment manager serving institutional and personal clients worldwide.

With more than $521 billion in assets under management, we offer our clients a full range of investment management capabilities, from single-style mandates to complete program outsourcing.

We are a leader in providing:

- **Quantitative and enhanced index management**
- **Active investment management**
- **Manager-of-managers programs, including alternative investments**
- **Transition management**

We serve a broad range of clients, including:

- **Corporate and public retirement programs**
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- **Taft-Hartley plans**
- **Insurance companies**
- **High net worth individuals**

Locations:

50 S. La Salle St., Chicago, IL 60675

65 E. 55th St., New York, NY 10022

300 Atlantic St., Suite 400, Stamford, CT 06901

6 Devonshire Square, London ECZA4YE

Izumi Garden Tower, 6-1, Roppongi 1-chome, Minato-ku, Tokyo, 106-6010, Japan

161 Bay Street, Suite 4540, B.C.E. Place Toronto, Ontario, Canada M5J 2S1

We look forward to assisting you with all of your investment needs. Please feel free to contact us anytime.

Kevin Rochford, ***Managing Director, Global Sales and Client Servicing,*** **312-444-3666**

Raheela Gill Anwar, ***Director, Client Service and Internal Sales,*** **312-557-8573**

Bob Gray, ***Director, Institutional External Sales,*** **312-444-7361**

Don Pollak, ***Director, Strategic Accounts,*** **312-444-7795**

Northern Trust

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Anything But Passive

now offers more opportunity than ever. "The wave of investment products based on indexes has been remarkable, both for its variety and popularity," stated Don Phillips, managing director of Morningstar, in the forward to Steven Schoenfeld's book, discussed below. "With index funds, exchange-traded funds (ETFs) and a host of index-based derivative instruments, the tool kit at an investor's disposal has never been broader or deeper."

Kathleen C. Taylor, CFA, Senior Vice President and Principal of LCG Associates

Active Index Investing

And few investors know these tools as well as Steven A. Schoenfeld, chief investment strategist of global quantitative management at Northern Trust Global Investments and editor of Active Index Investing, (Wiley Finance, 2004), a comprehensive book which highlights approaches to maximize portfolio performance and minimize risk through index-based strategies. Steven joined Northern Trust in October, along with Robert Ginis, senior investment strategist. Prior to joining Northern Trust, Steven and Robert were managing partners at consultant Global Index Strategies, which specialized in financial product development and benchmark research. Steven was previously chief investment officer at Active Index Advisors, a managing director at Barclays Global Investors and an investment officer at the International Finance Corporation/World Bank. Robert was previously head of international equity strategy at BGI, a portfolio manager at Emerging Market Management, and a market analyst at IFC/World Bank.

"The term active investing is most decidedly not an oxymoron," says Steven Schoenfeld. "It describes the active nature of managing index-based portfolios, and it also describes a philosophy or approach that uses index-based tools in creative (nonpassive) ways to change the risk-return profile of an investment." Steven and Robert work together with the Northern Trust quantitative portfolio management groups — which run more than $185 billion in index and enhanced index strategies — to provide efficient and cutting edge investment solutions to clients.

Enhanced indexing is one important area of focus for the quantitative management team today. As Jeremy Baskin, director of global quantitative active strategies, Northern Trust points out, the beauty of enhanced indexing is that techniques can and will evolve as new market inefficiencies develop. "We look forward to bringing these new techniques to our clients," says Jeremy. "Because they fit well within a risk-budgeting approach, they can be used in combination with, or in place of, a core index approach or traditional active approaches."

Jeremy Baskin, Director of Global Quantitative Active Strategies, Northern Trust

* *Pensions & Investments, November 15, 2004, page 1*