FIGURING IT OUT

SIXTY YEARS OF ANSWERING INVESTORS' MOST IMPORTANT QUESTIONS

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To Burt Malkiel, dear friend over many wonderful years as co-author,[1] co-director,[2] co-board member,[3] co-teacher,[4] co-advisor,[5] Dean,[6] and delightful source of understanding and wisdom. No one could be a better companion in striving to figure out the dynamic world of investing.

[1] *Elements of Investing*.
[2] Vanguard.
[3] Rebalance and Wealthfront.
[4] CFA workshop at Princeton.
[5] Pew Charitable Trusts.
[6] Yale School of Management.

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Foreword

To invest well is not easy. At least that's what the data suggests—just look at the well-documented consistently poor performance of most portfolios, whether individual or institutional. But it doesn't need to be as hard as we have made it, says this book. If we focus on what really matters over the long term, we can each help ourselves and our clients figure out what's most important for eventual success. We tend to allow short-term influences to occupy far too large a share of mind, to the detriment of focusing on actions that will improve long-term outcomes.

That central message is what this book is about, and embedded in it is a timeless roadmap that investors and investment practitioners can and should follow. It is a set of principles derived from the many front-row seats that Charley Ellis has occupied over the last six decades—a period that encompasses the most profound transformations that have taken place in the investment industry.

Charley's keen observations and writings over these years elucidate what has changed—and also what has been enduring. The essays of this book represent (1) his foundational principles for succeeding in the business of investment management; and (2) his unambiguous insights and guidance that make investment stewardship much less daunting—for the sophisticated as well as the lay investor.

The power of Charley's insights comes from their validation in history. He teaches us that "figuring it out" in investing is being able to see in current and future developments what matters and what does not, which in turn needs to be anchored in a well-developed understanding of the past and the nature of the forces that have brought us to the present. That's why wise people study history and seek out the original documents. That's why we read biographies of great leaders. And that's why historians say the best way to understand the present is to understand the past and the best way to understand the past is to study what came before and caused it. And that's why we ask new friends, "Please tell me your personal story." This book provides just such narratives through a documentary history of this period of great industry change.

Each essay yields enduring insights and lessons, among them:

- For clients of investing organizations, individuals and institutions will both benefit from behind-the-scene insights into the degree of change in the very nature of the daunting challenges faced by all active managers. As Dorothy said to Toto: "We're not in Kansas any more"—again!
- For those who are aiming to make their careers in this remarkably well-paid field of endeavor or are early in their careers as practitioners, here is an opportunity to appreciate how change is itself a powerful constant in the investment space, and how critical it is to anticipate and embrace innovation and evolution.
- For practitioners near the completion of their careers, there are provocative reminders of past developments we underestimated (to our regret) or recognized only slowly. And they keep coming!
- For those who seek metaphorical investing advice that will remain ingrained, "The Loser's Game," "Murder on the Orient Express," and "Investing Success in Two Easy Lessons" are must reads.
- For those who wonder where and how fees can so adversely affect investors' long-term welfare, several essays make it all quite clear.
- For those who still harbor hopes that indexing may have had its day, the negative case is clearly presented.
- For those who are looking to succeed as a client, "The Winners' Game" and "Best Practice Investment Committees" provide must-read guidance.
- For those who worry that business profitability all too often encroaches on professional values, there are several appeals from an ultimate insider for a re-orientation of the industry.

Investing and investment stewardship are a journey. Through beautifully written and colorful prose, this book brings to life the pitfalls we will face time and again, and it provides a clear roadmap for making that journey less hazardous and ultimately one of great success.

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Note on the Text

These essays were originally written decades ago, and, at that time, investment managers were male, so "he/him/his" are the form used in the book.

Introduction

One of the great joys of a professional life, as physicist Richard Feynman once explained, is the joy of "figuring it out." Of course, figuring out investing questions is not as important and certainly not as enduring as figuring out the basic laws of physics, but it certainly is, has been, and likely will be as fascinating—and more fun.

Readers leafing through this collection of pieces will, I hope, enjoy being reminded of some of the great controversies that have animated the world of professional investing over the past 60 years. For me, the privilege of engaging in those controversies in various ways—depending on my role as teacher at, lucky me, Harvard, Yale, and at Princeton, or as a speaker at conferences all over North America, Europe, and Asia, or as a participant in a 30-year series of seminars for senior investment managers (sponsored by a leading Wall Street research firm) or in a seemingly infinite number of lunches and dinners—gave me a wonderful way to learn from others and to learn how best to express my own thoughts.

Within the enormous world of the economy, the world of investing always was and is relatively small, but that reality has also offered great advantages. Within our community, we know each other and are friends, often dear friends. We like to share our best ideas and insights and are always learning from each other. And almost always, we have fun. Do you know of any other field in which age differentiates so little? Is there any other field in which practitioners continue well into their eighties? Any other so replete with new learning? Any so well paid? Any in which each individual would be good friends with at least 100 peers and often with over 300 all over the world? Of course, the number of friendly acquaintances might be 10 times greater.

When I left Harvard Business School 60 years ago with an MBA and headed to Wall Street in 1963 and a happy career in investing, the School offered no courses in investing, there were no CFAs, and almost nobody was interested in the stock or bond markets. Worldwide employment in the securities and investment fields was less than 5,000. Half a century later, employment was well over 500,000 and likely one million and HBS offered three dozen courses on all sorts of investing, and almost everyone seemed interested in the securities markets. At least as important, the average talent of the men and women engaged in all aspects of investing had steadily increased to make the field known today for having many of the most talented, best-informed, hardest-working, and best-paid people in the world.

Over the years, many, many forces have combined to change—and change again and again—the realities of the field of investing. It has been my great privilege to be an active observer of the forces driving those changes.

Changes in beliefs have come far more slowly. Among those "slow to change beliefs" have been the belief that identifying first-rate managers is the client investor's main priority, that fees are low ("only one percent"), and bonds should be used in substantial amounts to create "balanced" portfolios. Meanwhile, a few other beliefs *have* changed. Market timing is now viewed negatively. International investing is viewed positively—and "active" investing continues to give way to indexing.

Performance measurement firms have shown that identifying superb managers is not easy and SPIVA data shows grimly that, over the longer term, fewer and fewer active managers have been able to achieve market-beating results. Worse, identifying the favored few *in advance* is nearly impossible and those who fall short fail by much larger amounts than the slim benefit of "success." Gradually, but slowly, more and more investors have taken note and now, at an accelerating rate, indexing is gaining greater and greater acceptance as the rational way to invest in today's stock markets because, over the long term, indexing *assures* "Top Quartile" results.

Fees are increasingly recognized as large—particularly relative to lower returns—and investment managers increasingly compete for business by advertising their lower fees. (But recognition has still been moderate, most likely for two reasons: First, nobody actually writes a check to pay for a manager's service: fees are quietly deducted from the assets managed. Second, fees are almost always described as a percent of assets. If fees were described as a percent of returns—or worse for active managers, as a percent of risk-adjusted incremental returns—surely, the pressure would be far greater.)

Belief in bonds as the way to damp down changes in the stock market continues among investors and their advisers. This will likely continue. The "opportunity cost" of owning bonds vs. owning stocks is hard to compare to the "anxiety cost" of being exposed to stock market fluctuations. Canards like "Invest your age in bonds" are easy to remember and somehow sound like experience-based wisdom. And, of course, few investors see their securities portfolios correctly as only one component of their Total Financial Portfolio which, for most of us, has large stable value components like our homes, the net present value of our future incomes or savings, and our Social Security benefits.

Psychologists tell us that beliefs, whether political or social or financial, are very hard to get believers to change, particularly if those beliefs are long held or part of a system. Attempting to cause change in beliefs by using logic or evidence typically leads to increasing resistance or "digging in." That's why Darwin lamented that his scientific friends would have to die off before his carefully documented theories would be accepted—and he was right!

Many unusual realities contributed to my life of learning: studying for my PhD when the academic community was super-charged with the exciting discovery of efficient markets and MPT; teaching advanced courses on investing multiple times at both Yale and Harvard; teaching for 15 years in week-long programs for experienced professionals at Princeton, leading a 30-year series of twice-a-year three-day seminars with the "best and brightest" fund managers; many years of service to the CFA Institute; service on over a dozen investment committees around the world, consulting repeatedly with well over 100 of the world's best investment managers; writing several books on investing; and, best of all, having the privilege of many great personal/professional friendships around the world with leading practitioners, so I was, time and again, able to see the process of change. These 39 articles, like reports from the field, tell my story of learning about important aspects of investing.

While many investors focus their attention on finding a really good investment manager, my unusually wide exposure—largely through three decades of consulting for Greenwich Associates with many investment managers and securities firms around the world, particularly in the US, Japan, and the UK (but also Germany, Switzerland, Canada, Singapore, and Australia) gave me a special insight. I realized that it was almost *easy* to find excellent investment managers but that was not the right question; the right question was whether it was realistic to search for a manager who was sufficiently *better* than the many really good investment managers so that he or she would achieve "better than the market" results *after* costs and fees and, for individual investors, taxes. That is a very different question. And the grim reality is that the answer to that question is almost always, No!

So, while some part of these articles can be claimed to be original ideas, most are reports by an observer who was fortunate to have learned from others and was able to join the pieces into a hopefully useful whole. For me, the experience of writing and figuring things out has been great fun and a chance to learn from others. Sometimes my learning came before the particular pieces came together and sometimes came afterwards because some pieces seemed controversial when they first appeared and led to great discussions—and clearer explanation. One happy surprise for me: While some of these pieces may have become outdated because things changed, none have proven to be wrong. As always, my hopes are two: First, that readers will enjoy them and, second, that any disagreements will be shared with me so I can keep learning.

Charles D. Ellis
New Haven, CT
March, 2022

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The Changing Game

Examples of major changes in the whole system of a major industry are few and far between, except in technology. Virtually every aspect of investment management—fees, competitors, technology, regulators—and information have changed over the last half-century. Even the speed of change has changed.

Charles Darwin lamented that his innovative theory of evolution would not be accepted by the scientific community until his friends and colleagues had died or retired. His peers would have to be replaced by others whose careers were not so invested in or based on and devoted to pre-Darwinian concepts that they had become unwitting captives of their prior work and stature as traditional biologists.[1]

The stock market itself is Darwinian—always evolving. And as increasing numbers of investment professionals with more training and better tools and more access to more information *and* as investors move money toward more capable managers *and* as managers compete to attract more business, fund executives promote their best performing portfolio managers and analysts, it cannot be surprising that the effectiveness of active investors as a group continues to increase. That's why we say, "Markets are always learning." And that's why securities markets have been unrelenting in their increasing efficiency—and harder and harder to beat or even match—particularly after covering the higher

[1]This included Professor Louis Agassiz, Harvard's and America's leading biologist, who became famous in history as the man who stubbornly refused to accept Darwin's theory of evolution.

fees now being charged. The fees may well have been justified in the early or middle years of a 50-year transformation, but a rich variety of charges have combined to bring to an end the era of successful active management.

In his classic book, *Scientific Revolutions*, Thomas Kuhn explained why the problem Darwin faced was not confined to biology or science: It is universal. Those who have succeeded greatly and have risen to the top positions in their fields naturally resist—often quite imaginatively and often quite stubbornly—any new, "revolutionary" or disruptive concept. There are two main reasons for resistance: First, most of the new hypotheses, when rigorously tested, will not prove valid. So, over time, leading members of the Establishment can get over-confident and dismissive of *all* new ideas. Second, the members of the Establishment in any field have too much to lose in institutional stature, their carefully developed reputations as experts, the value of their many years of past work, and their earning power—all dependent on the status quo—*their* status quo. So they defend against the "new." Usually, they are proven right—so they win. But not always.

Dynamics of Innovation

There is a remarkably consistent iterative process by which the best innovations overcome resistance and eventually gain acceptance. The *process* of change follows a repeating pattern although the *pace* of change can differ markedly from one innovation to another.[2] Two kinds of actors play key roles: Innovators and Influentials. *Innovators* tinker and experiment all the time, looking for the next new thing. Unlike most people, they are so keen to find and use the latest innovation and they enjoy being first so much that they do not mind the costs in time, energy, or expense of most innovations not proving out, so they continue experimenting with what's new. Figure 1.1 shows how Innovators are the first to try things out.

Influentials are different. While they like finding new and better ways, they dislike the cost, bother, and frustrations of "new way" failures. So their strategy is to watch the Innovators and their experiments closely and, when the Innovators' experiments work, selectively adopt the most promising successes. As a result, Influentials learn about successes early

[2]The use of penicillin and hybrid-seed corn illustrates the process. Farmers converted to hybrid seed over 10 long *years*; doctors adopted penicillin in less than 10 *months*.

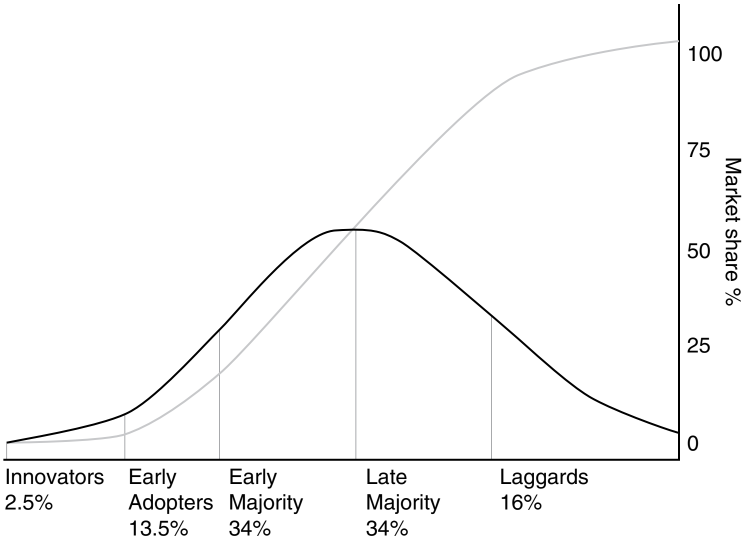

Figure 1.1 Incremental and Cumulative Acceptance

and develop considerable skill at evaluating which Innovators have the best innovation records and are most repeatedly successful. And this is why they become Influentials.

While Influentials are monitoring the Innovators for successful innovations, many Followers are monitoring the Influentials. When Influentials adopt a new way, the Followers[3] will then—in increasing numbers and with increasing commitment—follow their lead. (Of course, that's why they are called Influentials.)

In his scholarly book, *Diffusion of Innovations,* Everett Rogers established the classic paradigm by which innovation reaches a "tipping point" and then spreads exponentially through a large social group. Most members of a social system rely on observing the decisions of others when making their own decisions.[4] Decisions to adopt a new way repeatedly follow a five-step process:

1. Awareness of the new way.
2. Evaluation: forming a favorable (or unfavorable) opinion.

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[3]Followers can be divided into two groups, sometimes called "Early Majority" and "Late Majority" and even later "Laggards" follow. Acceptance by "Early Majority" produces the "tipping point" phenomenon.

[4]In institutional investing, a "dependency" exists when an influential "selection consultant" drives all or most of his clients to add (or terminate) a particular manager, but otherwise most institutions and most individuals appear to make manager selection decisions rather independently on their own terms and schedule—*not* "I'll have what she's having."

3. Deciding whether or not to change to the innovation.
4. Action: Adopting (or rejecting) the innovation.
5. Confirmation: evaluating the results of the innovation.

Deciding, the third step, depends on the decider's confidence in the benefits, the decision's compatibility with current habits and norms, and how the decider anticipates others will perceive the decision and whether they will approve.

The speed with which new and better ways of doing things are adopted is a function of several contributing factors: how large and how visible are the benefits; the speed with which benefits become visible; the ease and low cost of experimentation; the ease and low cost of reversing a mistaken decision; and the quality of the channels or networks by which information and social influences get communicated and expressed. Resistance to change, on the other hand, is a function of uncertainty about the benefits of the innovation or the ease of adoption; the risk of social approbation the new adopter may experience; the risk tolerance of the prospective adopter; the speed with which rewards and benefits will be received; etc.

Diffusion is the social process by which individual adopters influence others to adopt. Opinion leaders are important in any social movement, so diffusion will be retarded by any stigma attached to adoption. As an example of social stigma, Rogers cites the failure of a public heath campaign in Peru because local culture held that only "unwell" people would drink boiled water. So healthy people refused to boil theirs. Significantly, index investing was attacked, several years ago, as a haven for "wimps without skill," just "settling for just average," and even dismissed as "unAmerican."

Combining Kuhn's and Rogers' theories on innovation together provides a way of understanding how and why the inevitable triumph of indexing is steadily advancing *and* how and why its advance is still being resisted or even ignored by many practitioners devoted to active management. The distribution of an innovation and its adoption works through the interaction of a social system[5] and its opinion leaders. The speed of distribution varies with the strength of the social system.

[5]There are two types of social systems: homophilous and heterophilous. Heterophilous social systems are populated by many different types of participants from different backgrounds who are more likely to be interested in new ideas and innovations. Homophilous systems are more consistent and conservative—and more attentive to conforming to pre-existing norms. For example, the QWERTY keyboard is still used despite the fact that another keyboard allows most people to type much faster.

The informal social system for the selection of investment managers is remarkably weak. For individual investors, three inhibiting characteristic factors dominate: the all-too human desire among individuals to "do better" by trying harder; the "yes, you can" encouragements of investment advisors, consultants, and other perceived experts who make their living as advocates of trying harder to do better; and the media advertising, articles, and program content that focus on and celebrate winning.[6] You will, or course, hear little about the numbing consistency with which a majority of active managers fall short of the index or how seldom past years' "winners" are winners *again* over the next few years or longer.

The iterative process of social acceptance and resistance can seem glacially slow as they work their way through many layers and kinds of social resistance—particularly the resistance by those with a lot to lose if substantial acceptance develops. But impatient observers might consider the difficult pathway of, for example, the theory of evolution. Texas *still* requires public schools to treat evolution and creationism as equally serious alternatives. Persuading Americans to use seat belts—even when the historical data was powerful—took years and lots of public service advertisements, deliberately annoying noises, and local police enforcement.[7]

Early "Performance Investing"

In his *General Theory*, J. M. Keynes wrote: "The game of professional investment is intolerably boring and over-exacting to anyone who is entirely exempt from the gambling instinct; whilst he who has it must pay to this propensity the appropriate toll." Note the word "game" as coined for all time in 'Adam Smith's[8] mid-1960s best seller, *The Money Game*,

[6]If you watch stock market reports on TV, note how much the newscasters sound like sportscasters.

[7]Other examples include reduced cigarette smoking and use of seat belts in automobiles. Other changes have faced strong resistance: like desegregation in the 1960s, control over assault weapons or reducing obesity, which leads to adult onset diabetes with all its anguish. Persuading smokers to quit smoking needed a bold and costly "confrontational" campaign working on 14 different dimensions and took years of hard data on early deaths from cancer plus heavy taxation, smoking bans on planes, in buildings and by individual companies. So we know the process of changing behavior is often slow, particularly to those who expect prompt, rational action based on objective evidence.

[8]*Nom de plume* of George J.W. Goodman.

where he chronicled and explained with delightfully sardonic humor the amazing new world of "performance" investing. It was, as he said, "an exercise in mass psychology, in trying to guess better than the crowd how the crowd would behave."[9] The author went on to explain, "The true professionals in the Game—the professional portfolio managers—grow more skilled all the time. They are human and they make mistakes, but if you have your money managed by a truly alert mutual fund or even by one of the better banks, you will have a better job done for you than probably at any time in the past."

'Adam Smith' then turned appropriately to the grand old man of performance mutual funds, Fidelity's Edwin C. Johnson, as his ultimate source of profound thought:

> 'The market,' said Mister Johnson, 'is like a beautiful woman—endlessly fascinating, endlessly complex, always changing, always mystifying.[10] I have been absorbed and immersed since 1924 and I know this is no science. It is an art. Now we have computers and all sorts of statistics, but the market is still the same and understanding the market is still no easier. It is personal intuition, sensing patterns of behavior. There is always something unknown, undiscerned.'[11]

'Adam Smith' then led his readers through a charming review of Gustave Le Bon's *The Crowd,* linked that with Sigmund Freud, reflected on Chester Bernard's *The Functions of the Executive,* and then returned to Keynes. ". . . Americans are apt to be unduly interested in discovering what average opinion believes average opinion to be; and this national weakness finds its nemesis in the stock market . . . Investment based on genuine long-term expectation is so difficult today as to be scarcely practicable."

Turning next to Ben Graham, 'Adam Smith' quoted from the Dean of Analysts' great book, *The Intelligent Investor,*

> Mathematics is ordinarily considered as producing precise and dependable results; but in the stock market, the more elaborate and abstruse the mathematics, the more uncertain and speculative are the conclusions

[9] Adam Smith, *The Money Game* (New York: Vintage Books, 1976), p. 18.
[10] There goes Ben Graham's Mr. Market again, cleverly "protecting" us from seeing the truth and enticing us with hopes of being the lucky one who, despite the adverse odds, will be the winners.
[11] Ibid., p. 25.

> we draw therefrom. In 44 years of Wall Street experience and study, I have never seen dependable calculations made about common stock values or related investment policies, that went beyond simple arithmetic or the most elementary algebra. Whenever calculus is brought in, or higher algebra, you could take it as a warning signal that the operator was trying to substitute theory for experience.[12]

'Adam Smith' also popularized the question that seemed to capture the imagination of investors in the 1960s: "Do you sincerely want to be rich?" as in, "Do you really want to detach yourself from reality?" He provided his readers with an attention-getting bit of history:

> You can also see the point in time when 'performance' surfaced. In February, 1966, Gerry Tsai, born in Shanghai and tutored at Fidelity, came to New York. He had been running Fidelity Capital. He had a reputation as a shrewd trader, and he was doing well, but, as he told Mister Johnson, 'I want to have a little fund of my own.' Gerry thought maybe he could raise $25 million and so did the underwriters, Bache & Co. But the spirit was abroad in the land. The orders went over $50 million to $100 million, finally to $247 million on the first day, and within a year to more than $400 million. Gerry Tsai was not the first 'performance' manager; Mister Johnson and Jack Dreyfus had pioneered that well. But he was the first real 'star.'[13]

The early 1960s practitioners of "performance" investing experienced early-stage difficulties that would be unfamiliar to later participants. Block trading was just beginning; brokerage commissions were fixed—at an average per share of over 40 cents; in-depth research from Wall Street was new; computers were confined to the "cage" or back office; Quotron machines that could show current prices were new; and trading volume was 1/10 of 1% of today's volume. "Performance" investing was costly and overcoming the costs was not easy.

Those who succeeded attained "hero" status—particularly among the managers of the major mutual funds. Understandably, these heroes attracted lots of business to their mutual funds.

As demand for "performance" built up, supply expanded in both the number of mutual fund providers and the variety of fund offerings:

[12]Ibid., p. 135.
[13]Ibid., p. 181.

open-ended, closed-ended, no-load, balanced, growth, value, small cap, bonds, high-yield bonds, international, emerging markets, and even frontier markets. Today, mutual funds serve over 52 million American households[14] and manage $26 trillion world-wide.

Another example of change came with the surge in corporate pension assets in the 1950s and 1960s—beginning with the GM-UAW labor settlement in 1952. With Federal wage and price controls firmly prohibiting a large pay increase, the parties solved their conflict by agreeing to fund "fringe benefit" for the auto workers, primarily pensions. Uncomfortable with the 5% limit on equities imposed on *insured* pensions, General Motors and other corporations turned to their major banks' trust departments—they had had traditional investment experience caring for the personal trusts of wealthy customers—for 50:50 stock and bond portfolios. Accepted as a "customer accommodation" at little or no fee,[15] corporate pension assets accumulated rapidly. Soon, the larger money center banks became enormous investment managers, as well as the major consumers of brokers' research and big customers for Wall Street's emerging capabilities in block trading.

Change led to further change as new investment firms organized to compete for the burgeoning pension business—some as dedicated subsidiaries of mutual fund organizations, but most as independent firms. Their main proposition: active management by the most talented young analyst/portfolio managers—who would be first to find and act on investment opportunity—could meet or beat the same results that "performance" mutual funds were achieving *and* would work directly with your corporation's pension fund. The "new breed" and their proposition were compelling, particularly in comparison to the committee-centric, conservative, even stodgy trust administrators at the banks.

As mutual funds advertised "performance" and performance investing, a new service[16] was created that measured the performance of the banks and insurance companies that were managing most major pension funds and compared their results to the new breed of investment firms. The data on the money-center banks' performance was often disconcertingly disappointing to the banks' customers. Adding insult to injury,

[14]Versus 23.4 million in 1990.

[15]Doubting they could charge much in fees and interested in protecting their important corporate customer relationships, the banks found a novel backdoor way to make money as investment managers. They directed the trust department's commission business to those brokers who agreed to keep large balances on deposit—balances that the bank could profitably lend out. (The terms of reciprocity were agreed at, typically, $5 in commissions for every $100 of balances and were closely monitored by both sides.)

[16]A. G. Becker & Co.

these new firms were often populated with the "best and brightest" young men and women who were leaving the banks whose formal trust department procedures they found stultifying and financially unrewarding. Increasingly, the money that was accumulating in pension funds began pouring out of the bank trust departments and into the new investment counsel firms that promised superior performance.

Significantly, the terms of competition had changed in ways that continued to surprise the banks and insurers. With their long experience in institutional financial services, such as bank loans or cash management or commercial insurance, the banks *knew* to expect tough price competition and bargaining by major corporate customers. So, the banks and insurers competed on low price. But pension management had been converted by performance investing from a *cost*-driven market into a *value*-driven market—with value determined by perceptions and expectations of future investment performance.

Pricing of investment management services has had an interesting history *and* a single direction: higher. Before the thirties, conventional fees for separate account clients were charged as a percent of the income received in dividends and interest. During the 1930s, Scudder, Stevens & Clark shifted the base for fee calculation to a 50:50 split—half based on incomes and half based on assets. Still, the level of fees charged was low. So investment counseling might be a fine *profession*, but it certainly was not a great *business*. Those going into investment management typically hoped only to cover their costs of operation with client fees and then make some decent money by investing their own family fortunes. If the investment profession was interesting, the investment business certainly was not.

"Performance" investment management was different. The new investment managers were pricing their services on the basis of expected or perceived *value*. While all fees were seen as quite low—"only 1%"—the new managers found they could easily charge fees much higher than the banks and insurance companies had ever charged. Happily for investment managers, higher fees became a confirmation of the higher value expected to be delivered and "quibbling" about fees was increasingly dismissed. ("You wouldn't choose your child's brain surgeon on the basis of price, would you?") Over the 1960s, 1970s, and 1980s, assets of mutual funds, pension funds, and endowments ballooned at the same time fees for investment management rose steadily higher and higher. So the *business* became increasingly profitable—eventually, one of the world's most profitable businesses. And this profitability flowered into higher and higher compensation to successful analysts and portfolio managers and higher profits for investment firms. High pay—and interesting work—attracted more aspiring analysts and portfolio managers—meaning more competition for each other—which developed into the dynamics that would inevitably make it increasingly difficult to achieve sufficiently superior performance, to justify the increased fees being charged—a reality we will return to later.

Soon, a new kind of corporate middle management role emerged: the internal management of external investment managers of pension funds. Supervising 10, 20, or even 30 investment managers and meeting each year with 25 to 50 investment firms hoping to be selected and then selecting the best of breed—and doing all three well—required the expertise of full-time specialists—typically aided by external investment consultants.[17] At most corporations, pension fund executives—often on a few years' rotation through differing jobs in financial management—report to an investment committee. Most committee members are internal finance people who are understandably preoccupied by their own daunting responsibilities in capital budgeting, controllership, capital raising, etc. and usually have not studied investing or investment management extensively. So internal executives often hired external investment consultants who wielded increasingly great influence, particularly on selecting and monitoring numerous active managers.

In the early 1970s, investment consultants began providing a specialist service for an annual fee that was less than the all-in cost of another junior fund executive. Based on regular in-depth interviews and careful assessment of past investment performance, these consultants offered to provide independent evaluations of dozens of investment managers and bring the "best of the best" for a final evaluation by the fund executive and his investment committee. (It cannot be surprising that indexing was seldom recommended.) By the mid-1980s, over half of the larger pension funds were using one or more investment consultants. With dozens of these consultants[18] scouring the nation for promising new investment managers and recommending the use of dozens of specialist

[17]Many of these specialists enjoyed the work and the travel to meet with current and prospective managers and decided to make careers as fund executives.

[18]In the long run, their results also proved disappointing. (Being in business, they naturally presented themselves in the most favorable light. In particular, this meant that when they stopped recommending a manager—usually for failing to perform—they deleted that manager from their records. After all, why continue to track a manager who had failed? How many go back to see—let alone go inside—a house they moved out of some time ago? One important result: By deleting "failed" managers from their selection results—and adding new "winners"—the consultants, however unwittingly, substantially enhanced their own records.)

managers, getting into business became easier and faster for promising new investment firms. Increasing numbers of energetic investment managers formed new firms—or new pension divisions for established investment organizations—to pursue the burgeoning demand.

Because securities markets always have more noise than information, observers relying on available data—individual investors, institutional fund executives, investment consultants, and even the managers themselves—will be unable to sort out sufficient information from the noise when evaluating active managers to make good estimates of which managers will achieve superior future results. This difficulty traces back, layer after layer, to the well-known prediction troubles in stock selection and portfolio management: Success in a securities market is not determined by whether you are right, but by whether you are *more* right than other buyers and sellers who are acting on their beliefs that they are more right than you are. In his wonderful book, *The Signal and the Noise,* Nate Silver[19] explains why we mistake more confident predictions for more accurate ones. He reminds us: ". . . it is not so much how good your predictions are in an absolute sense that matters, but how good they are *relative to the competition*. In poker, you can make 95 percent of your predictions correctly and still lose your shirt at a table full of players who are making the right move 99 percent of the time." As Silver says, "That's why poker is a hard way to make an easy living."[20]

Vanguard examined reported mutual fund performance over time and found no significant pattern. The Vanguard study concluded:

> Results do not appear to be significantly different from random, aside from the bottom quintile. Taking this analysis to its logical next step, one might rightly assume that funds that fall to the bottom quintile might be the next to fall into the liquidated/merged bin. Indeed, when we [studied] funds that fell into the bottom quintile as of December 31, 2006, we found that fully 50% were liquidated or closed by year-end 2011, and that 10% remained in the bottom quintile, while only 21% managed to right the ship and rebound to either of the top two quintiles.

As Vanguard explained its research:

[19]Founder of the *New York Times* political blog, FiveThirtyEight.com.
[20]Nate Silver, *The Signal and the Noise* (New York: Penguin, 2012), p. 313.

To analyze consistency within the actively managed fund space, we ranked all U.S. equity funds in terms of risk-adjusted return for the five years ended 2006. We then selected the top 20% of funds and tracked their risk-adjusted returns over the next five years (through December 31, 2011) to see how consistently they performed. If those top funds displayed consistently superior risk-adjusted returns, we would expect a significant majority to remain in the top 20%. A random outcome, however, would result in approximately 17% of returns dispersed evenly across the six categories.

The results, as shown in Figure 1.2, were disconcertingly close to completely random.

Changes in supply and demand and the role of intermediaries interact repeatedly in the dynamic investment management marketplace to create new forms of change. One early example of change centers on mutual funds. Beginning with Massachusetts Investors Trust and State Street Fund in the late 1920s, mutual funds provided individual investors—who typically invested in only a few stocks and had been using expensive retail stockbrokers—with a better product that incorporated diversification, convenience, and professional supervision by experienced investment professionals overseen by distinguished boards of directors—all delivered reliably and regularly for a moderate fee. As experience proved out the advantages, demand for mutual funds increased and as demand increased, supply, of course also increased. More and more mutual funds were organized, distribution channels developed, and funds got increasingly advertised. Initially, mutual funds were sold

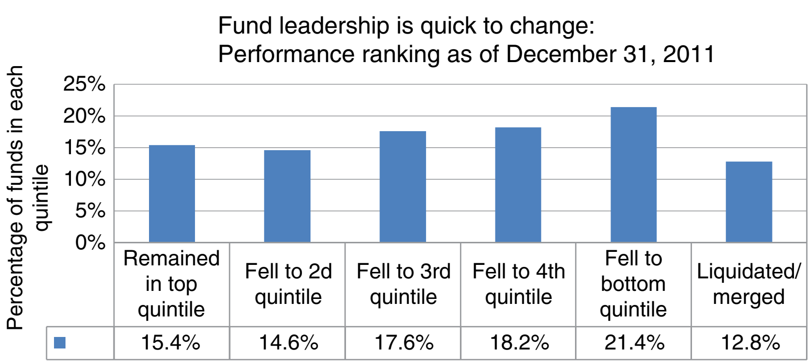

Figure 1.2 Fund Leadership Is Quick to Change: Performance Ranking as of December 31, 2011