Chapter 1

The Claw Will Take Your Money

"10 − 2 = 8"

"We live in a great and free country," I told my 8-year-old son Kevin, as we sat eye-to-eye at the kitchen table one day in what I hoped was one of those father/son bonding moments. I continued by explaining that we are so prosperous because of a beautiful thing called *capitalism.* And that one of the benefits of capitalism is that if we don't spend all of the money we have, we can invest it in companies. "Our money will actually grow," I said, miming a tree growing with all the dramatic flair a CPA can muster.

"How fast will it grow?" asked Kevin. I estimated that owning stocks has resulted in about a 10 percent annual growth, meaning that every dollar invested would be worth $2 in 7 years, $4 in 14 years and almost $7.50 in 21 years.

Kevin was amazed and excitedly blurted out, "If I invest all the money from my grandparents, I can buy anything I want when I'm older!" I'd hooked him.

At this point, I had to clue him in on one more thing. I explained that in order to see their money grow, most people who invest pay about 2 percent per year to helpers. That means instead of $7.50 in 21 years, he'd only have about $5.00, I told him.

"What do the helpers do?" asked Kevin.

The answer, of course, was *absolutely nothing.* If the stock market earned 10 percent and the average investor paid Wall Street 2 percent, that left only 8 percent for investors. This is simple arithmetic any second grader can do.

Upon hearing this news, Kevin looked a little less excited. If there's one thing every second grader has a clear grasp of, it's what is and isn't fair. Being a second grader and therefore one of the "go-to" guys in determining fairness, Kevin decreed, "That doesn't sound fair." He astutely noted that if he didn't have to pay the 2 percent, then he could keep the entire 10 percent, affirming we really were from the same gene pool.

I then explained to him that we always have to pay something to invest, but we could cut that 2 percent down to 0.2 percent. Realizing that he would get to keep nearly the entire 10 percent that his money would grow, Kevin perked up again—although he still wondered aloud, "Why do people pay two percent when they don't have to? That sounds like 'the claw' to me."

Kevin was referring to an arcade machine where you put a quarter in and direct the claw scooper over a bunch of prizes in the hopes that it will pick up the prize you're aiming for. (See Exhibit 1.1.) After all, snagging some cool stuffed animal for only a quarter was virtually irresistible. For a few weeks, Kevin would spend a portion of his allowance trying for his

Exhibit 1.1 The Claw Always Wins

The Claw is a game few will win.

grand prize. He got nothing. After feeding it a few dollars, Kevin had an *aha!* moment. "This game is a ripoff!"[1] he said, as he came to the painful realization that he wasn't going to get that prize he had repeatedly aimed for. He hasn't played the claw game since.

I've often wondered why adults keep feeding quarters to Wall Street. In response to his question, I could have launched into some scaled-down explanation of the efficient market hypothesis, but instead I just thought of Charley Ellis's timeless investing book, *Winning the Loser's Game* (McGraw-Hill, 3rd ed., 1998) and recited the book's famous message (with a small tweak to appeal to Kevin):

> Paying Wall Street is a loser's game. Your odds are probably better with the claw.

The Common Sense of Kevin's Math

If you have any investing experience, you may be thinking that I've just skipped the whole debate between active and passive investing.

Active management refers to the use of a human element—such as a single manager, co-managers, or a team of managers—to actively manage a stock portfolio. Active managers rely on analytical research, forecasts, and their own judgment and experience in making investment decisions on what securities to buy, hold, and sell. Warren Buffett and Bill Miller, for example, have long-term track records of beating the market.

Passive management is an investment theory that states that it is impossible to "beat the market" because stock market efficiency causes existing share prices to always incorporate and reflect all relevant information. People who ascribe to this are generally followers of the *efficient market hypothesis* (EMH). According to the EMH, this means that stocks always trade at their estimated fair value on stock exchanges, making luck responsible for investors either purchasing undervalued stocks or selling stocks for inflated prices. Burton Malkiel's famous book, *A Random Walk Down Wall Street,* advocates passive management.

Can I just make the assumption that the expenses associated with active investing (the 2 percent I mentioned earlier) don't add any value? As you'll see, we don't actually need to explore this active-versus-passive debate, because the answer is merely dependent on second-grade arithmetic. There are countless papers, books, and experts all around us that claim to beat the market. After all, they state, it's not about the lowest cost; it's about getting the highest return. The arguments for active management have two things in common:

1. They are emotionally appealing.
2. They fly in the face of simple mathematics.

Sticking with the theme of simple math, let's examine the simple $10 - 2 = 8$ equation by looking at the U.S. stock market.

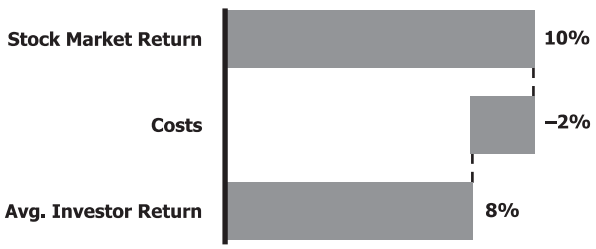
The U.S. Stock Market

The U.S. stock market is comprised of roughly 7,000 individual stocks with a total value (market capitalization) of roughly $17.5 trillion. Wall Street revenue from the services it provides is roughly $350 billion[2] (which just happens to be about the size of the U.S. deficit[3]). The Wall Street take is about 2 percent of the value of the U.S. market.

While Kevin won't have the lessons to construct the whole portfolio until Chapter 2, let's take a look at how Kevin's total U.S. stock index fund will perform in a year with a bull market return, average market return, and bear market return with an expense ratio of 0.2 percent, and compare it to the professionally managed Wall Street U.S. portfolio. Exhibit 1.2 illustrates the return of the Wall Street portfolio versus Kevin's portfolio in an up year in the market.

Exhibit 1.2 Net Investor Returns—Up Stock Market

If the stock market earns 10% and the average investor pays 2%, the average investor earns 8%.



Second grader portfolio earns 9.8% besting the avgerage investor by 1.8%

Exhibit 1.3 Net Investor Returns—Down Stock Market

If the stock market loses 10% and the average investor pays 2%, the average investor loses 12%.

Second grader portfolio loses 10.2%, besting the average investor by 1.8%

Kevin also earned the 10 percent of the U.S. market but only paid 0.2 percent in expenses (to Vanguard). Thus, he earned 9.8 percent, which is a full 1.8 percent more than the average investor earned. Will this work in a down market as well? The answer is an unequivocal *yes!* In a year where the stock market loses 10 percent, the average investor will lose 12 percent. Because Kevin pays 1.8 percent less than the average investor, he again earns 1.8 percent more. See Exhibit 1.3.

What does this extra 1.8 percent in annual earnings mean? Let me put it a couple of different ways:

1. At an 8 percent annual return, Kevin's dollar invested would be worth over $21 in 40 years, when he's his old man's age. At 9.8 percent, however, it will be worth over $42. In other words, that extra 1.8 percent of annual return nearly doubles his portfolio's final value.
2. We adults may not have as many years to benefit from the power of compounding as Kevin does, but I've found that my average clients can reach their financial goals by a year sooner for every 0.25 percent they can lower expenses in

their portfolio. This means that 1.8 percent is worth about seven years to us adults. And, as you will soon learn, most adults can boost return by far more than this 1.8 percent, thus reaching our goals that much sooner.

An important item to note is that Kevin's advantage isn't dependent on whether the market goes up or down; it's dependent only on the difference in expenses that he is paying versus the Wall Street average expense.

A second important item is that this argument of simple arithmetic is not dependent on the efficient market hypothesis. It doesn't matter one iota whether stocks are efficiently priced or wildly misvalued. The only thing that matters is that all investors—you and me—cannot be above average and that $10 - 2$ *must* equal 8! So, forget the debate about the efficient market hypothesis and remember the *second-grader hypothesis* that $10 - 2 = 8$. Of course, this is adapted from Jack Bogle's *cost matters hypothesis.*

The International Stock Market

The same simple arithmetic of investing that worked for the U.S. stock market must work in the international stock markets as well, right? International markets have their versions of helpers who get their take of the action. The argument that international markets are less efficient than the U.S. market happens to fly in the face of contrary data. According to Morningstar, the Vanguard Total U.S. Stock Market Index Fund (VTSMX) has bested 77 percent of its peers over the past five years. That's pretty impressive, but the Vanguard Total International Index Fund (VGTSX) bested 86 percent of its peers.[4]

Granted, we could debate the point of whether international markets are less efficient, but the argument also happens to be irrelevant. The world stock market has a total value of roughly $40 trillion and, while coming up with the total fees charged by the worldwide helpers is more difficult, there is no reason to believe it should be any less than 2 percent. So, the

Exhibit 1.4 Kevin versus Wall Street International Portfolio

	Bull Market	Average Market	Bear Market
Wall Street Stock Portfolio			
Stock Market Return	30%	10%	−10%
Wall Street Take	−2%	−2%	–2%
Average Investor Return	28%	8%	–12%
Kevin's Stock Portfolio			
Stock Market Return	30%	10%	–10%
Kevin's Expense	–0.2%	–0.2%	–0.2%
Kevin's Return	29.8%	9.8%	–10.2%
Second-Grader Advantage	1.8%	1.8%	1.8%

concept remains the same. If Kevin owns the international markets at the lowest costs, he *must* beat the average professionally managed global portfolio that has higher costs. See Exhibit 1.4.

The Bond Market

I'll explain a bit later in the book why everyone needs some fixed-income investments (bonds)—even a second grader with a very long investment horizon. For now, let me say that every argument made for keeping fees low in the stock market applies just as stringently in the bond market. That is, the average bond investor will get the average bond return before expenses. Thus, owning the entire bond market at the lowest costs must yield a return that beats the more expensive professionally managed portfolios.

The Arithmetic of Active Management

As much as I'd like to claim that this simple mathematics is the brainchild of Kevin's and my brilliance, it isn't. A fellow by the name of William Sharpe, the winner of the 1990 Nobel Prize in Economics, wrote a famous paper called "The Arithmetic of Active Management."[5] In it Sharpe states, "Properly measured, the average actively managed dollar must underperform the

average passively managed dollar, net of costs." He also notes that the proof is "embarrassingly simple."

It's simple enough that an 8-year-old can understand it, yet somehow very difficult for us adults to grasp. *We adults seem to buy into the expectation that* our *active manager is really good, so we will be among the few who beat the market. Of course, if my manager is so good that he can beat all the other managers, then why isn't he working for the billion-dollar investors?*

Can My Professional *Really* Beat Yours?

One reason that ignoring simple mathematics seems preferable to most adults is that we strongly resist thinking of ourselves as average. And if by some wild chance we *are* average, can't we just find a money manager who is above average? Whether we are in the casino or playing the stock market, it's virtually impossible to resist thinking of ourselves as a Doyle Brunson or a Warren Buffett.

It seems intuitive that paying a professional investor to pick the right stocks and mutual funds should add value. The logic goes that someone who constantly studies the market should be able to outperform individuals who "play" the stock market. This might have actually been true at one time when there were but a handful of professional investors, and stocks were largely owned by individuals. In 1945, only about 10 percent of U.S. stocks were owned by institutions. So it's not hard to imagine that the small population of professional investors might be able to add value when trading with a large population of individual investors.

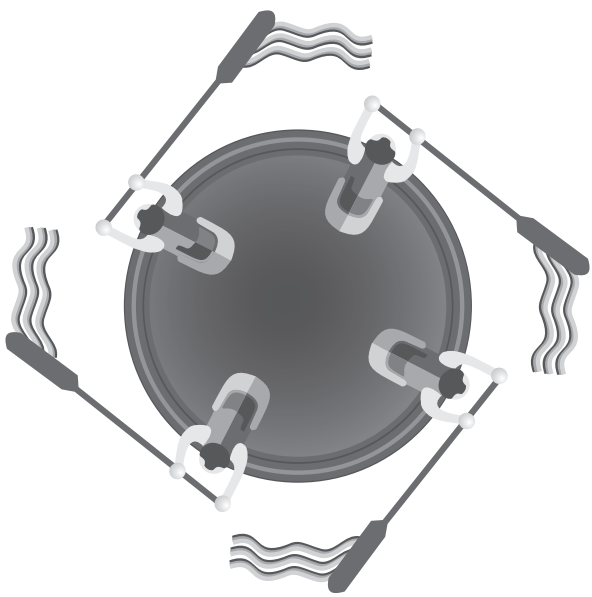
Today, however, 80 percent to 90 percent of the stock market is owned by professionals such as pension plans, mutual funds, and insurance companies.[6] Information flows much more freely and instantaneously, thanks to the wonder of the Internet. *Anyone* can listen in on a company's earnings report, rather than just a few selected analysts as was the case in the past.

When it comes to picking an investment professional, the following analogy may click for you: *If you needed heart surgery, you wouldn't go bargain hunting for a surgeon*. This analogy breaks down when you consider the nature of both professions. Unlike medicine, or almost any other profession, investing is a zero-sum game. That is, one surgeon's success has no impact on another's. Investing, however, is precisely the opposite. If my mutual fund manager purchases a stock from yours, my manager's gain (or loss) comes at a direct cost (benefit) to yours—for every investor who beats the market in a given year, there is another who's lost by the same amount.

If we take a step back, we realize it all comes down to paying our professional more and more money in the hopes that he outsmarts someone else's professional. It's a flawed model, much like the one in Exhibit 1.5. No matter how much money

Exhibit 1.5 Active Investing Model

Paying a team of professionals to outsmart other professionals is a flawed design.



we pay to get the best rowers, we're still going in circles. Paying more to get the best rowers may just make us dizzy, but you can bet it's making the rowers rich! The harder they row, the faster they spin, and they will make progress only when the rules of simple arithmetic are repealed.

Following the track record of the professionals perpetuates this flawed design. Statistically they are every bit as likely to underperform as the individual investor. Luckily, this depressing trend has not seemed to dampen the spirits of any of the professional investors I have spoken with. They all claim to beat the market, just like in Lake Wobegon, where we are all above average.

Why We Play a Loser's Game

If active investing is so illogical, then why do we adults practice it regularly? Traditional economics dictates that we would act in a rational manner to increase our wealth. Unfortunately, traditional economics fails to take into account that we are feeling animals who happen to think, rather than thinking animals who happen to feel.

Behavioral finance is a fascinating new field of investing that is a combination of psychology and finance. It shows that we consistently act in ways that result in lower economic gains. It shouldn't be surprising that we are willing to dismiss common sense and hold that the laws of simple mathematics don't apply to us. Maybe they apply only to, you know, the *average* people, not those of us who are above average.

As a practicing financial planner, I have individuals come to me all the time who have played the beat-the-market game with high expenses. As we go through this book, I'm going to give you some real-life examples that will make you cringe.

These people usually have two things in common:

1. They have absolutely no idea how much they are paying for their portfolio. When you look at the costs of your

portfolio, such as the expense ratio of your mutual funds, and then throw in some hidden trading costs, you'll discover the painful reality that most people are needlessly paying thousands of dollars a year for their portfolio. Curiously, these are often the same people who are very cost conscious in other areas of their lives. If only they could transfer that penny-watching to their investing.

2. In at least 95 percent of the cases, their portfolio has vastly underperformed the comparable low-cost indexes. That is to say, the higher fees they paid for the professional have resulted in lower returns. Clearly, their attempt to disprove the equation $10 - 2 = 8$ has failed miserably.

When I show clients how they underperformed the low-cost comparable indexes, I typically get one of two responses. The first type of knee-jerk response is *"Get me out of here, quickly!"* They have used their logical brain and understand the opportunity they have to cut costs and earn more for themselves going forward. This epiphany often comes with much self-flagellation. I try to impress upon them that they are among the few that actually questioned how their portfolio has performed, and that's a good thing. I do my best to make them feel better, but a motivational coach I am not.

The second type of response is the one I find the most fascinating. I call it the "You don't understand!" approach. In trying to convince me that I don't understand, they'll become quite upset, resolute in their belief that my benchmarking can't be right. To these people, it was very important that their perception of being above average remained intact, and I was raining on their parade. Far from looking to me for wealth building direction, they instead were looking to me for confirmation of their brilliance and I wasn't cooperating. In my experience, people often place the benefit of the psychological gain they receive from their investing decisions over any economic gain they could achieve by halting their attempt to disprove second-grade arithmetic.

I used to think of it as a personal failure when I was unable to convince individuals how much economic gain they could have by changing course. Didn't I just show them how they lost out on tens of thousands of dollars in return? How could they benefit by continuing to chase whatever hot, flavor-of-the-month stocks came their way?

Then the obvious occurred to me, like realizing those glasses I was looking for were on my head. Those "above-average" people who believe they know more than the rest of us keep the market efficient, and here's how. They, along with the "professionals" of Wall Street, think they know more about a company than other people. Armed with this superior knowledge, they will then buy or sell that stock to someone else, typically one professional selling the stock in the company to another professional. Did I mention that both professionals are being paid by us to be smarter than each other? Anyway, that causes the market price of the security to change, which keeps the market going.

So, the investors who believe that they can pick stocks, or at least pick a professional who can pick stocks, better than the average Joe, fill an important need. Without these people trying to disprove arithmetic, markets wouldn't work, and the low-cost investor couldn't get a free ride off of their delusions and harness all that the market has to give.

Ultimately, the logic becomes more flawed with the belief that we can pick people who have access to managers who can beat the market. Using private money managers would be an example. That's rather like rejecting the argument that $10 - 2 = 12$ in favor of the argument that $10 - 3 = 13$. All we are doing is adding another layer of costs.

Kevin Doesn't Play That Game

Kevin knows that $10 - 2 = 8$. In spite of how much we want to believe it, $10 - 2 \neq 12$. While he hasn't read Sharpe's "Arithmetic of Active Management," he does know that if the market return is

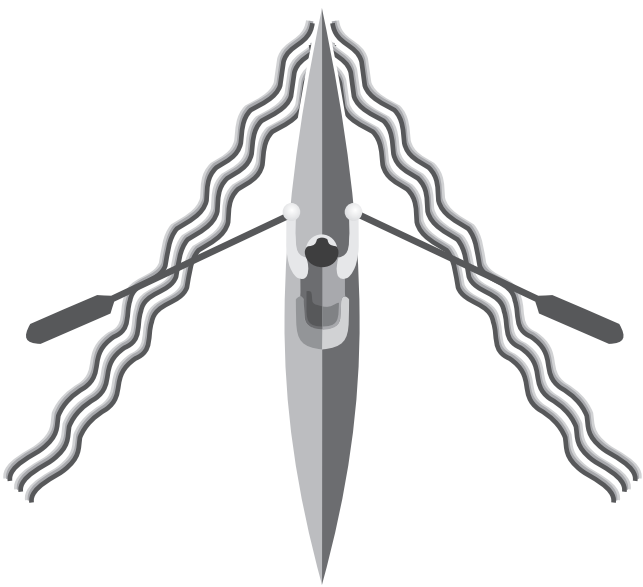
10 percent and the helpers take 2 percent, then there is 8 percent left for the investors. He knows that if the helper gets a 0.2 percent fee rather than a 2 percent one, there is more left for him. He doesn't understand the efficient market hypothesis and doesn't need to. All he cares about is that he came out ahead. It's that simple.

I posed this question to Kevin: "Which would you rather have: the belief that you are making a lot of money, or actually making a lot of money?" He fixed me with a gaze that pretty much said, "You're kidding, right?" and answered that he'd rather *make* the most money, not *think* that he had. *Duh,* Dad.

The second-grader portfolio sheds those bulky rowers and cuts costs to the bone. It's completely different from the Wall Street version. It's a simple, far more logical and streamlined model where an 8-year-old can effortlessly row past the professionals (see Exhibit 1.6).

Exhibit 1.6 Second-Grader Investing Model

The simpler design is superior.



In short, Kevin finds believing in Santa Claus more plausible than many of the investing assumptions held by adults. "It's just silly," explains Kevin. "How could people not know that ten-minus-two equals eight?"

Applying the Golden Rule: 10 − 2 = 8

We haven't yet reached the *how-to* advice, but Kevin's lesson on simple arithmetic shows that if the basis of your investment plan goes against simple arithmetic, you are on the losing end of the claw game. Sure, there are a few highly skilled investors out there, Warren Buffett for instance, but your odds of finding the next Warren Buffett are not good.

Find out how much you are paying in costs. If you are investing directly, go to www.morningstar.com and look at the expense ratios of your mutual funds. If they are greater than 0.5 percent, you, too, are trying to disprove second-grade math. In Chapter 5, I'll show you what your odds are, but for now, I'll just say the odds are you don't know the odds.

If you are using an advisor, money manager, financial planner, or any other helper, my advice is to ask that person how much you are paying. Make sure you ask the question, "How much am I paying in total?," rather than just how much he is making from you. As much as your helper won't like this, get him to put the answer in writing, and make sure it's in terms of both percentage of assets and total annual dollars.

Always remember that market return less costs equals the average investor return. If your costs aren't the lowest available, then mathematics will not be on your side and you should expect an uphill battle. Your Wall Street advisor may make a compelling pitch as to why the strategy will work, but if it goes against the golden rule of simple arithmetic you are likely making someone else rich.

So take Kevin's advice and stop playing a loser's game. Don't feed quarters to the Wall Street claw.