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Guiding Principles of Morningstar's Equity Research

What is a moat? For most people, images of water-filled trenches protecting castles from invaders immediately come to mind. We have taken that concept and applied it to investing, where an economic moat is a structural barrier protecting companies from competition.

Here at Morningstar, we've always viewed investing in the most fundamental sense of the word: We want to hold shares in great businesses for long periods of time. So what's a great business? Essentially, we believe it's one that can fend off competition and earn high returns on capital for many years into the future—increasing earnings, returning cash to shareholders, and compounding intrinsic value. Identifying companies like this is the goal of our economic moat analysis and our Morningstar Economic Moat Rating, which we explore in great detail in the coming chapters.

Even better than finding a great business is finding one at a great price. The stock market affords virtually unlimited opportunities to track prices and buy or sell securities at any hour of the day or night, but we think the key to successful long-term investing is concentrating not on the daily price movements of a stock but on the value of the cash flows generated by the underlying business. When you focus on a company's underlying fundamental value relative to its stock price, and not where the stock price is today relative to a month ago or a day ago or five minutes ago, you start to think like an owner, rather than a trader.

If you're looking for a book on how to get rich quick by trading in the stock market, you've come to the wrong place. Our goal is to give you a fundamental framework for successful long-term investing, which, we admit, is all we really know how to do. Our book aims to answer two primary questions: How can we identify which businesses are great? And when is the best time to buy these businesses, in order to maximize potential returns? If you can get just these two things right more often than not, you'll be well on your way to becoming a successful long-term investor.

When Morningstar first started analyzing stocks more than a decade ago, we began with some core principles that guide our research to this day. Then and now, our analytic work has centered on three main elements: sustainable competitive advantages, valuation, and margin of safety, which we believe are the keys to outperforming the stock market over time. How exactly do we define these terms and why do they matter? That's the purpose of this book. Throughout the coming chapters, we give you an overview of each of these principles, with the primary focus on how to identify companies with sustainable competitive advantages, or economic moats.

Question 1: How Can We Identify Which Businesses Are Great?

The answer to this question lies in finding companies with sustainable competitive advantages, or economic moats. Just as moats were dug around medieval castles to keep enemies at bay, economic moats protect the high returns on capital enjoyed by the world's best companies.

Moats

In a famous 1999 *Fortune* article, legendary investor Warren Buffett wrote, "The key to investing is . . . determining the competitive advantage of any given company and, above all, the durability of that advantage. The products or services that have wide, sustainable moats around them are the ones that deliver rewards to investors." With gratitude to Mr. Buffett, Morningstar has taken the economic moat concept a step further and developed a comprehensive moat-based analytic framework that can be applied consistently across a broad, global list of companies.

Whenever a company develops a profitable product or service, it isn't long before other firms try to capitalize on that opportunity by producing a similar version, or even improving on the original version. We know from microeconomics that in a perfectly competitive market, rivals will eventually compete away any excess profits earned by a successful business. Nokia boasted the majority share of the mobile phone market for several years, but the introduction of Apple's iPhone in 2007 and the subsequent evolution of the smartphone market left the flat-footed Nokia behind. A similar shift has occurred in the gaming industry, where longtime powerhouse Nintendo is seeing its iconic, family-friendly franchises left behind by powerful new consoles boasting high-end third-party software, such as Microsoft's Xbox and Sony's PlayStation. Meanwhile, mobile devices have begun to erode Nintendo's dominant position in the handheld gaming market. In other words, profits attract competitors, and competition makes it difficult for firms to generate strong growth and margins over the long term.

But there are definitely some companies that manage to earn high returns on capital for extended periods of time. These companies are able to withstand the relentless onslaught of competition for long stretches, and these are the wealth-compounding machines that we want to find and own.

It's important to note that an economic moat must be a structural element of the business itself. We're not looking for companies with better short-term execution than competitors, or cyclical improvements that make returns on capital look good. We're looking for companies where the business and industry structure protect profits. Along these lines, while great management can certainly enhance a company's moat, just as poor management can detract from it, management itself cannot form the basis of an economic moat (more on that in Chapter 4).

Moats and Value Creation

How much value a company will create for itself and its shareholders depends on two things: the amount of value currently being created and the business' ability to continue to create value well into the future. The first factor is widely

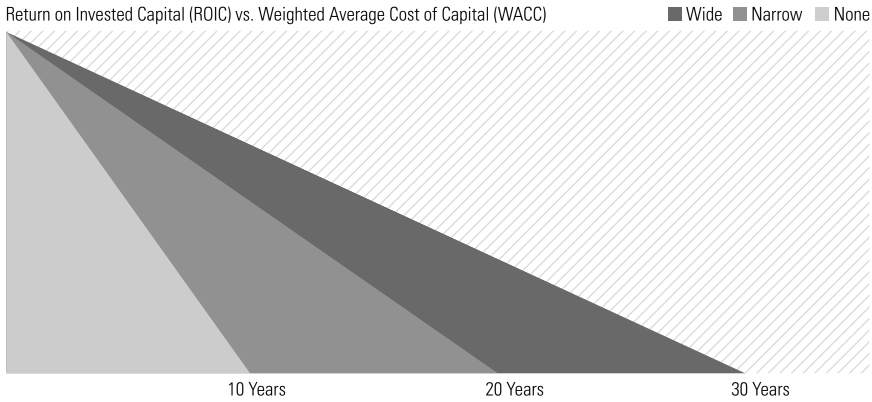

Figure 1.1 Measuring a Moat by the Duration of Excess Returns
SOURCE: Morningstar.

known by the market because it's easy to calculate using basic financial statements. It's the second factor, the magnitude and duration of future excess returns, that is harder to determine but is ultimately more important for successful long-term investing.

Here's another way to illustrate this idea: Take three companies, each with a similar value-creating return on invested capital, or ROIC, today. The company that is able to sustain those excess returns the longest is going to be able to add the most value for itself over the coming years. In Figure 1.1, the company with the widest moat and the longest advantage period has the greatest value creation (area under the curve).

Moats in Action

What does an economic moat look like for a real live company? Take electric utility ITC Holdings as an example. Electricity transmission isn't exactly a sexy business, but investors in this pure-play transmission company have enjoyed double-digit earnings growth and healthy returns on capital thanks to its dominant market position and favorable long-term regulatory framework. We believe this "boring" utility has a wide economic moat that should protect those high returns for years to come. Its competitors have little incentive to build competing transmission lines if one that ITC owns is already serving a market's full capacity; capital costs are too high and incremental benefits too low to offer sufficient returns for two competing transmission owners. In addition, ITC benefits from regulatory protection. The Federal Energy Regulatory Commission approves new transmission lines only if there is a demonstrated need for new capacity. In exchange for regulatory protection, ITC must charge rates based on a formula that allows ITC to recover its expenses and earn a reasonable return on investment. We believe that because of its transparency and predictability, a forward-looking formula rate—which is more investor-friendly than typical backward-looking rates given to most utilities—results in a below-average cost of capital for ITC and supports stable cash returns that we expect to last years into the future.

Contrast this with no-moat ethanol firms like Pacific Ethanol, VeraSun Energy, and Aventine Renewable Energy that boomed and then quickly busted in the past decade. The ethanol frenzy rose to a fever pitch in mid-2006, fueled by waves of government support and hotly anticipated IPOs. Two years later, investors in the corn-based fuel product were left with billions of dollars in losses as lofty expectations of this "wonder product" failed to pan out. This disappointment exemplifies an industry where it's virtually impossible for a company to earn a moat, while it's easy for new ethanol firms to enter, and hard for any single firm to establish a cost advantage, causing eventual oversupply and weak or nonexistent profits for all players.

Moat Sources

Over years of studying companies, we have identified five major sources of competitive advantage, or economic moat. We discuss each source in depth in the next chapter, but here's a quick rundown of the five:

1. Intangible assets

   Intangible assets include brands, patents, or government licenses that explicitly keep competitors at bay.

2. Cost advantage

   Firms that have the ability to provide goods or services at lower cost have an advantage because they can undercut their rivals on price. Alternatively, they may sell their products or services at the same prices as rivals, but achieve fatter profit margins. We consider economies of scale to be a type of cost advantage, an idea we discuss in more detail in the next chapter.

3. Switching costs

   Switching costs are those one-time inconveniences or expenses a customer incurs to change from one product to another. Customers facing high switching costs often won't change providers unless they are offered a large improvement in either price or performance, and even then, the risk associated with making a change may still prevent switching in some industries.

4. Network effect

   The network effect occurs when the value of a particular good or service increases for both new and existing users as more people use that good or service, often creating a viscious circle that allows strong companies to become even stronger.

5. Efficient scale

   Efficient scale describes a dynamic in which a market of limited size is effectively served by one or just a few companies. The companies involved generate economic profits, but potential competitors are discouraged from entering because doing so would result in insufficient returns for all players.

Assigning Moat Ratings

When assigning moat ratings, we first consider the five qualitative factors outlined earlier. But we also look for quantitative evidence of a moat, namely, a company's ability to earn excess returns on invested capital. The size of the spread between ROIC and cost of capital is actually far less important than the expected duration of the excess profits. When we believe that a company will more likely than not benefit from a competitive advantage and earn excess returns for a period of at least 10 years, we assign it a narrow moat rating. When we're near-certain that a firm will earn excess returns for the next 10 years, and likely for the next 20 years, we assign the firm a wide moat rating. Clearly, the hurdle is high for earning a wide moat rating, and despite scouring the universe of listed companies, we have assigned wide moat ratings to fewer than 200 companies globally.

Question 2: When Is the Best Time to Invest in Great Businesses?

It's tempting to conclude that wide-moat businesses are so rare and so great that you should buy them whenever you find them and hold on to them as long as their competitive advantages remain intact. However, the competitive advantage of a business is only part of the story. Our research shows that while wide moats can be a tremendous source of alpha, or excess return, for your portfolio, the advantage of owning wide-moat companies is much clearer and more persistent when you purchase them at a discount to the underlying business value.

The Importance of Valuation

Valuation is an incredibly important aspect of investing—you could argue, *the* most important. It makes sense when you think about it: You wouldn't want to pay $650,000 for a house that's worth $500,000, because even if it were a great house, it would take many years for the market to recognize the value of the house as $650,000, and at that point, you would have likely lost purchasing power in real terms after inflation. Even if you bought that same house for $500,000, or fair market value, you would see it appreciate only at the market rate of return. Ideally, you'd get an even better price on the house, perhaps buying it for $450,000, so you could benefit not only from the future market rate of return, but also from having the price converge from your discounted price to the fair market value.

While many investors get caught up in daily stock price movements, we prefer to think about valuation in the same way as you would a real asset, such as the house in the example above. There is a fair market value of any business, and opportunities to purchase great businesses at less than that fair market value give investors an advantage in generating future returns.

Estimating Fair Value

The key to successfully purchasing an asset at a discount to fair market value is accurately estimating the future cash flows you expect that business to generate. This is no easy feat, and there are many different ways to go about it. Some analysts look at current cash flows, or even earnings, as a proxy for cash flow, and assign a multiple to that earnings number to roughly "guesstimate" how long into the future they expect that cash-flow level and growth rate to persist. Others assume a perpetual growth rate, such as a long-term estimate of inflation, and use that to calculate the company's expected cash flows into perpetuity, then discount those cash flows back to a present-day figure.

At Morningstar, in an effort to be as precise as possible, we take a fundamental approach to valuation analysis and build a discounted cash-flow model for each company we cover. We talk through the details of that in Chapter 5, but in the meantime, here's a quick summary of what that means. After researching the company and its industry, we explicitly estimate the firm's revenue, earnings, balance sheet, and cash generation for the next several years (five to 10 years, depending on the situation). Consistent with microeconomic theory, we assume all businesses will earn their cost of capital only in the long run as competitors eat away at any excess returns—but we assume companies with wide moats will benefit from longer periods of excess returns than those with narrow moats, which will still earn excess returns for longer periods than businesses without moats. Then we discount the future cash flows back to the present using the firm's estimated cost of capital.

There are many points of uncertainty in this process, so we take a few extra steps to strengthen our analysis and adjust for potential unknown (and sometimes unknowable) factors. First, we put a lot of emphasis on scenario analysis, or looking at what the company would be worth in various situations. It's important to recognize that no one actually knows the exact fair market value of any business, so the goal is to understand the range of possible outcomes and narrow that range whenever possible. Second, we always look for a margin of safety before investing, even in a wide-moat company.

Margin of Safety

The concept of margin of safety has been around for decades; legendary value investors such as Ben Graham, Warren Buffett, and Seth Klarman have written about and utilized margin of safety in their investing disciplines. The basic idea is that because no one knows the true value of a security, purchasing it at materially less than fair value will help improve your odds of making a successful investment, because even if it's worth less than you originally estimated, you have improved your chances of a positive return by buying it at a discount.

Not every company requires the same margin of safety, though, and understanding how to adjust the discount you require can put the odds in your favor. Because of this, we developed the Morningstar Uncertainty Rating to help clearly identify the discount (or premium) we would seek before recommending the purchase (or sale) of a stock. We think uncertainty largely boils down to how difficult it is to forecast the future cash flows of the business in question. To try to gauge this, we look at the variability in revenues, operating income, and financial leverage over the course of economic cycles, as well as company-specific risks, because the cash flows of a business with wide swings in revenue, high fixed costs, and lots of debt, such as cement maker Cemex, are much harder to forecast than those of a very steady, conservatively run business like food giant Nestle.

That's a quick overview of our stock research process: look for a moat, determine a fair value, and leave room for error. Easier said than done. The following chapters delve more deeply into each of these topics and teach you how you can tackle each of these problems using the same tools and techniques we use when we're analyzing stocks at Morningstar.

In Chapter 2, we explore the five sources of economic moat in detail. Here and throughout the book, we use specific company examples to help illustrate how we think about moats and valuation in real-world situations. Chapter 3 focuses on moat trends, which provide perspective on how moats grow and shrink over time—moat trends provide a more dynamic assessment of how a company's competitive position is evolving. Chapters 4 and 5 elaborate on how to incorporate management and stewardship into the evaluation of a company's moat, with a particular focus on capital allocation and dividends.

We turn next to our valuation methodology, to give you a glimpse into our discounted cash-flow process and how we use it to estimate the intrinsic value of a business. In this section, we also include a few real-world portfolio examples, so you can see how we put moats, valuation, and margin of safety into practice.

Think of the second half of the book as a how-to guide for analyzing moats in each sector. We walk through each sector in detail, so you can understand how the evaluation of a firm's competitive advantage relates to its industry, get some perspective on how moats differ by sector, and gain tools to analyze a company's moat.

Throughout this book, we share the details behind our investment philosophy and our approach to company analysis. Our goal is to provide you with the methods to determine a company's moat, fair value, and margin of safety so you can apply this approach to your own investment decision-making.