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SECOND EDITION

VALUE INVESTING

From Graham to Buffett and Beyond

BRUCE C. GREENWALD JUDD KAHN
ERIN BELLISSIMO MARK A. COOPER TANO SANTOS

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Introduction

In 1999, when we began to write the first edition of this book, value investing as conceived by Benjamin Graham and David Dodd and developed by their successors was in eclipse as a method of stock selection. Academic finance had for 30 years embraced the Efficient Markets Theory (EMT), which rejected the possibility of consistently successful active investing. The stock market boom produced by the first Internet bubble appeared to invalidate all the analytical principles on which value investing was based. Value practitioners, with the notable exception of Warren Buffett, were dismissed as old-fashioned and out of touch with contemporary economic reality. Fortunately, the collapse of tech and telecom stocks between 2000 and 2002, coupled with the superior performance by value investors, revived interest in the Graham and Dodd approach. At the same time, a mass of published academic evidence powerfully contradicted EMT. Statistically constructed value portfolios generally outperformed the stock market as a whole over almost all extended periods in almost all the national markets for which sufficient historical data were available.

Increasingly accepted academic studies in psychology, pioneered by Daniel Kahneman and Amos Tversky, spawned the field of behavioral finance and provided an explanation for the historical outperformance of these value portfolios, grounding it in deeply embedded human behavioral biases. As a result, a “value premium” in returns appeared likely to be a persistent feature of future financial markets. These studies and continuing innovation by value practitioners led to a more thorough understanding of Graham and Dodd principles and marked improvements in value investing

practices, especially with respect to identifying and evaluating what are designated as “franchise” businesses.

The long bull market since the depths of the 2008–9 financial crisis has once again raised questions about the validity of a Graham and Dodd approach. During the years since 2009, many notable value investors have significantly underperformed national and global market indices. Carefully constructed statistical value portfolios have seen the gap between value and overall market performance narrow significantly if not entirely disappear. A new generation of technology stocks have provided sustained returns that again appear to contradict established value principles. And value investors are once again being dismissed as old-fashioned and out of touch with current economic reality.

In part, a decline in the relative performance of value portfolios is a predictable result of the valuation excesses of the later phases of any long bull market. Value investors have historically performed relatively poorly in these periods, as they did in the late 1990s. However, other important factors appear to be at work. First the renewed success of Graham and Dodd investing in the years from 2000 through 2007 increased the popularity of a value approach. Especially in the United States, the proportion of value oriented investors rose significantly. An increased demand for value stocks may have compressed the spread between glamour and value stock valuation multiples, although the evidence is mixed. Second, economic developments have complicated the task of applying Graham and Dodd principles. The shift in economic activity from industry/manufacturing to services has increased the importance of intangible capital—customers, trained employees, product portfolios, and brand images—relative to tangible capital—inventories, accounts receivable, property, plant, and equipment that accountants have

traditionally included on a business's balance sheet. Moreover, since investments in intangibles—advertising, hiring, training, and product development—are often counted as current expenses for accounting purposes, defining and measuring current earnings power has become more difficult. Technological developments have had a similar impact. Modern computer and Internet-based firms like Amazon, Google, Oracle, Facebook, Microsoft, and Netflix have relatively little physical capital. Much of their growth related investments are, for accounting purposes, buried in expenses, where they depress, perhaps excessively, reported earnings and raise some valuation multiples.

A further complicating factor is the increasing extent to which service and modern technology companies operate in local geographic markets or niche product markets. These local/niche markets are characterized by potential economies of scale and, through continuous customer interactions, high degrees of customer captivity. The result is an increased incidence of dominant local/niche market competitors who benefit from significant barriers to entry. In the language of value investing, “franchise” businesses with wide “moats” constitute an increasingly large fraction of overall economic activity. For franchise businesses, net assets play a diminished role in determining profits and growth contributes significantly to overall value. The consequence is that equity valuations depend heavily on future cash flows, and often far distant future cash flows, whose values are difficult to measure using Graham and Dodd asset value/earnings power value methods. Also for franchise businesses, management performance, especially with respect to capital allocation, has an enhanced impact on firm valuations. Not surprisingly in this environment, many traditional balance sheet focused value investors have not done well.

A final newly important factor that plays a role in the valuation of franchise businesses is the heightened potential for disruptive change that may undermine a firm's franchise position. For competitive businesses without significant economies of scale, any decline in profitability should be roughly offset by fixed and working capital recoveries as the business contracts. For franchise businesses, where earnings power value exceeds asset value, disruptive decline has much more serious consequences. Loss of economies of scale undermines earnings without any compensating return of capital. High returns on capital mean that lost earnings are only slightly offset by any realized capital recoveries. Dying franchise businesses are far less valuable relative to their pre-disruption positions than dying “cigar butt” businesses. Any attempt to invest in undervalued franchise businesses requires a careful assessment of the consequences of disruption.

These changes mean that we have to revisit all aspects of the approach to value investing laid out in the first edition of this book. We have rethought the imperatives of searching for and then valuing potentially attractive opportunities once they have been identified. We have also carefully examined active research processes once a preliminary valuation has been made and have looked at the issue of risk management far more extensively than we did in the first edition. In this revision we have benefited from observing practicing value investors and noting the adaptations they have made to changing economic circumstances. In all these areas, we have explicitly measured the advantages of a modern Graham and Dodd approach against what is ultimately the fundamental challenge facing any active investor. While there is now overwhelming evidence that financial markets are not efficient in the academic sense, there is a fundamental and

inescapable way in which markets are efficient. The average return to all investors in any asset class must be equal to the average return to all the assets in that asset class (i.e., the "market" return for that asset class). All the assets are owned by somebody and derivative arrangements (e.g., uncovered short sales) net out since for every seller there is an offsetting buyer. Therefore, if one investor outperforms the market for a particular asset class, another investor must underperform by a compensating amount, weighted by the assets under management. Since this constraint applies to all asset classes, it applies to investments as a whole.

Graham and Dodd were fully aware of this efficiency constraint although they described it in slightly different terms. They understood that every time someone bought a security thinking it was likely to do well relative to alternative opportunities, someone else was selling that security because they thought it would underperform the relevant alternative opportunities. Depending on the outcome, one of these investors always had to be wrong. The essential characteristic of a well-conceived investment process is that at every step—search, valuation, research process, risk management—it should place an investor on the right side of the trade. The process must be superior to that of the investor on the other side of the trade. This criterion is what we have used to explicitly measure the modern value investing practices described in this second edition.

The search process involves not only a value orientation, a preference for non-glamorous, ugly, out-of-favor, and obscure stocks, but also some degree of specialization. If I, as a generalist, trade with an equally capable and highly disciplined specialist, the specialist will usually have superior understanding and information. He or she will therefore more often than not be on the right side of the

trade. In this edition we have extended the search chapter to include a discussion of effective specialization strategies. Recent experience supports this point. Highly focused value investors tend to be unusually successful even compared to the value community as a whole. Successful but more broadly oriented value investors tend to perform better in industries and geographies where they have concentrated than in other areas. We have, therefore, added a number of specialized investors to our profile section. The Graham and Dodd concept of "circle of competence" applies not just to staying away from unfamiliar areas but actively defining focused fields of expertise.

We have over the years since the first edition learned a similar lesson with respect to valuation. Different assets with different return horizons present different valuation challenges. For liquidating assets or other short-term investments with catalysts, discounted cash flow (DCF) valuations are appropriate. The relevant cash flows are likely to be accurately estimated. Assets whose values are determined in competitive markets—real estate, natural resources, non-franchise businesses—are generally ones for which growth does not create significant value. This limits the importance of far future cash flows. For those investments the Graham and Dodd asset values/earnings power value formula, which ignores growth, is better than a DCF or ratio valuation for reasons we discussed in the first edition of this book. It is the approach of choice for most value investors. However, it is not suitable for evaluating businesses for which growth creates significant value. In these cases, growth means that far distant cash flows are both difficult to estimate because small differences in growth rates compound into large differences in far future cash flows and constitute an important fraction of value. As a result, current intrinsic

values for such businesses cannot be estimated with usable degrees of precision. Investment decisions are more usefully based on estimated future returns than estimated values. The major innovation in this edition of our book is the description through three extended chapters of a return-based approach to evaluating franchises businesses. The process we lay out may not turn out to be the last word in franchise business evaluation. However, we can say with confidence that a one-size-fits-all valuation approach is not likely to place investors consistently on the right side of the trade.

Close observations over the years since 1999 of the practices of successful value investors has led us to add a chapter on active research practices to the second edition. The rise of the importance of intangible investments and franchise earnings as global economies have evolved has meant the traditional financial statement analysis is no longer adequate to evaluate many businesses. The increasing importance of the quality of management stewardship of these assets to returns has also forced investors to look well beyond published financials in evaluating investments. These imperatives have created unprecedented demands on the investment analyst's time. Properly and efficiently focused active research processes are increasingly important to investment success. A better research process will put an investor more frequently on the right side of the trade. In this added chapter we describe what good active research processes look like.

Finally, the increasing importance of specialization and active research has created significant problems in risk management. Historically, individual investment managers have tended to build portfolios as if they managed most if not all of their clients' assets. They selected levels of diversification without reference to the fact that the wealth owners typically spread their holdings among many

investment managers. For wealth owners it is the risks of their overall portfolios that matter, and these overall portfolios often include large illiquid positions or businesses. In principle, wealth holders concerned with the risks of the complete portfolio should manage risks centrally. Decentralized risk management potentially leads individual investment managers to take offsetting positions —manager A embraces risks that manager B hedges—or positions whose returns are highly correlated with large illiquid wealth holdings. The result may be an expensive risk management process that does little to reduce overall portfolio exposures. With specialized investment managers, the benefits of diversification must be achieved at the wealth-holder level. Increasingly, therefore, risk management will be divorced from individual security selection. Centralized risk managers must receive sufficient information from their individual investment managers in order to do their jobs effectively. In light of these developments, we have included an extended discussion of risk management in the second edition. We carefully define risk from a Graham and Dodd perspective and describe effective practices for managing that risk.

The continuing vitality of the Graham and Dodd tradition has always depended on successful adaptation to changing economic and financial conditions by practicing value investors. We have revised the profile section of this book with this in mind. If investors we covered in the first edition have since passed away, we have included the original profiles without change to preserve the valuable insights they had to offer. The others we profiled have continued to innovate and improve their processes. Fortunately, most of them have spoken annually for many years in the MBA value investing course at Columbia. For them and other class speakers, we provide brief descriptions of where they stand in the broad spectrum of value investing practice and

how their approaches have evolved over time. Taking advantage of the advances in technology, these summaries are supplemented with access to edited online videos of investors-classroom appearances. Most of the new investors we have added to the second edition—Tom Russo, Paul Hilal, and Andrew Weiss, all specialists to some degree—have spoken in the class many times and will be treated in the same way. Two other important investors, one seasoned, Warren Buffett, and one new, Jan Hummel, have not spoken in the class. For Hummel we have presentations that we have edited for online access and which we have supplemented with a brief description of his specialized investment approach. As before, Warren Buffett will receive his own written chapter based on extracts from his extensive public commentary.

When we began working on the first edition of this book in 1999, Bruce had taught the value investing MBA course about five times, with some additional run-throughs in Executive MBA and 2 day Executive Ed versions. Twenty years later, even with a sabbatical now and then, he has taught it more or less continuously for around 25 years. In 2005, we published *Competition Demystified*, a detailed study of the factors that constitute sustainable competitive advantages and what distinguishes franchise businesses, firms protected by barrier to entry, from companies subject to competitive pressures. And during those years, both of us have had direct investment experience, working in a large global mutual fund and three smaller hedge funds. There is no doubt that all the additional teaching, thanks to the students and the guest investors who generously contributed their time and expertise to developing the Graham and Dodd tradition, has expanded our own understanding. At least as important has been our time in the field, so to speak. As the historian Edward Gibbon wrote in his Memoirs about his service in the Seven Years'

War, “The discipline and evolutions of a modern battalion gave me a clearer notion of the phalanx and the legion; and the captain of the Hampshire Grenadiers (the reader may smile) has not been useless to the historian of the Roman Empire.”

Bruce Greenwald and Judd Kahn, New York, 2020

1
Value Investing: Definitions, Distinctions, Results, Risks, Principles

What Value Investing Is

Value investing is an approach to investing originally identified in the 1920s and 1930s by Benjamin Graham and David Dodd. Since then, the approach has developed and flourished in the hands of a notable but relatively small group of investors, the most famous of whom is Warren Buffett, who was their student in the early 1950s. As initially defined by Graham and Dodd, value investing rests on three key characteristics of financial markets:

1. The prices of financial securities are subject to significant and capricious movements. Mr. Market, Graham's famous personification of the impersonal forces that determine the price of securities at any moment, shows up every day to buy or sell any financial asset. He is a strange fellow, subject to all sorts of unpredictable mood swings that affect the price at which he is willing to do business.
2. Despite these gyrations in the market prices of financial assets, many of these assets do have underlying or fundamental economic values that are relatively stable and that can be measured with reasonable accuracy by a diligent and disciplined investor. In other words, the intrinsic value of the security is one thing; the current price at which it is

trading is something else. Though value and price may on any given day be identical, they often diverge.

3. A strategy of buying securities only when their market prices are significantly below the calculated intrinsic value will produce superior returns in the long run. Graham referred to this gap between value and price as “the margin of safety;” ideally the gap should amount to about one-half, and not be less than one-third, of the fundamental value. He wanted to buy a dollar for 50 cents; the eventual gain would be large and, more important, secure.

Starting with these three assumptions, the central process of value investing is disarmingly simple. A value investor estimates the fundamental value of a financial security and compares that value to the current price at which Mr. Market is offering it. If price is lower than value by a sufficient margin of safety, the value investor buys the security. We can think of this formula as the master recipe of Graham and Dodd value investing. Where their legitimate descendants differ from one another—where each may add his or her unique flavor—is in the precise way they handle some of the steps involved in the process:

- Selecting securities for valuation;
- Estimating their fundamental values;
- Calculating the appropriate margin of safety required for each security;
- Deciding how much of each security to buy, which encompasses the construction of a portfolio and includes a choice about the amount of diversification the investor desires;
- Deciding when to sell securities.

These are not trivial decisions. To search for securities selling below their intrinsic value is one thing, to find them quite another. It is because the Graham and Dodd descendants have devised a variety of approaches to those tasks that value investing has remained a vital discipline through all market conditions in the more than eight decades since Graham and Dodd first published *Securities Analysis*.

What Value Investing Isn't

A common and brief summary of value investing is that value investors search for and buy only “bargains,” securities selling for less than their true or intrinsic values. There is a problem with this simple definition. No rational investor admits to searching for securities selling for more than their underlying value. Everyone is looking to buy low and sell high.[1] We need to be clear about what differentiates real value investors from all the others who trade in the securities markets (see Figure 1.1).

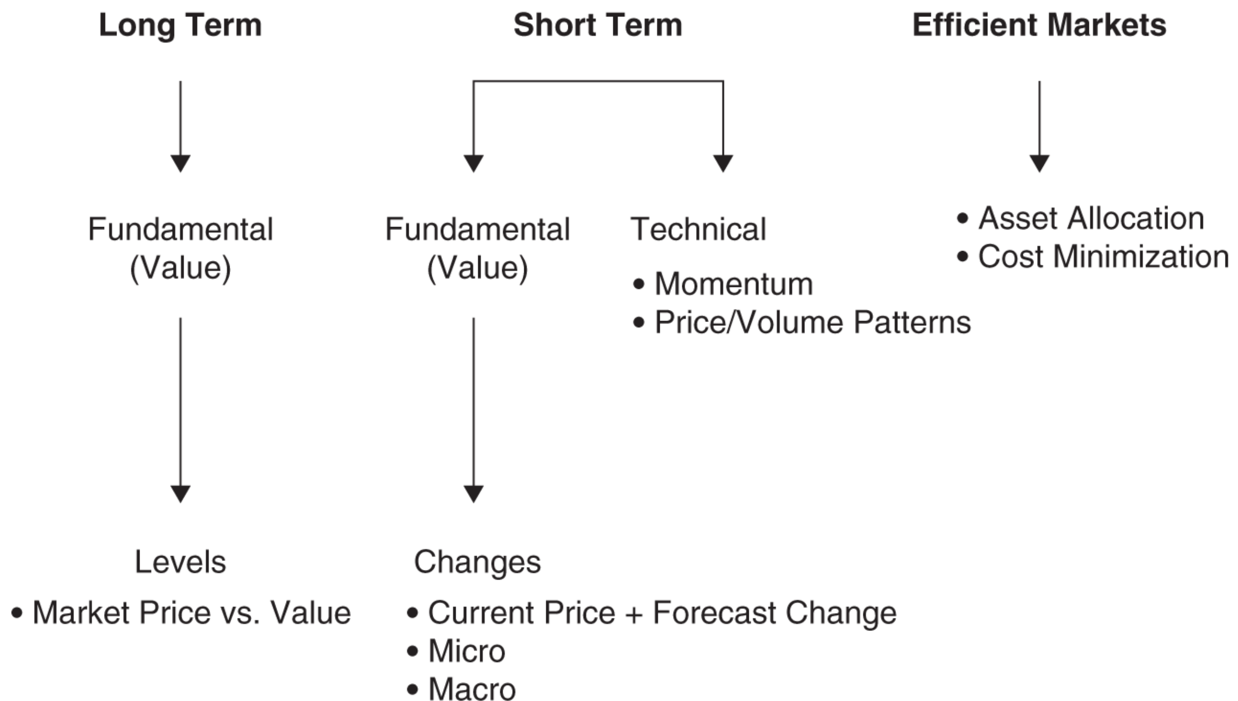

Figure 1.1 Approaches to Investing

One large class of investors who obviously do not qualify are “technical” analysts, or technicians. Technicians avoid fundamental analysis of any kind. They pay no attention to a company's line of business, its balance sheet or income statement, the nature of its product markets, or anything else that might concern a fundamental investor of any stripe. They care nothing for economic value. Instead they focus on trading data, that is, the price movements and volume figures for any security. They believe that the history of these movements, reflecting the supply and demand for that security over time, traces patterns that they can analyze to infer future price movement. They construct charts to represent this information, and they scrutinize them for signs that will predict how prices will move next and thus allow them to make a profitable trade. For example, momentum investors extrapolate the current price trend, buying securities whose prices are rising in the expectation that they will continue to go up. Sometimes they compare the day's price for the security to a trend line