Value Investing
From Graham to Buffett and Beyond
by Bruce C.N. Greenwald, Judd Kahn, Paul D. Sonkin and Michael van Biema

Built on the works of Benjamin Graham, the father of security analysis, value investing is based on the premise that the underlying value of a stock is measurable and stable even though the price can fluctuate widely. Value investing has remained a reliable and profitable discipline for decades and is utilized by many great investors including Michael Price and Warren Buffett who actually studied under Graham.

Investors aren’t objective or dispassionate, they respond to events in the world with powerful biases. For example, they frequently place more significance on the most recent news, good or bad, than is warranted, so stock prices of companies that report high growth rates are driven to extremes, as are companies that disappoint.

These excessive reactions cause stock prices to move above or below their real or intrinsic value and the core theme of value investing is to buy stocks when their prices are below their intrinsic values. Graham called the gap between price and value the "margin of safety." A large margin of safety both increases the potential return and reduces the risk of loss. Basically, the secret to superior returns is to buy stocks that are priced well below their real value.

Finding Value

Given the huge number of potential investments, identifying promising candidates for value investing can be a daunting task and value investors must keep two things in mind.

First, the investor must be aware of the limits of his or her own knowledge or competence. Buffett always looks for businesses that he can understand such as media companies and consumer goods firms. This way he can distinguish between genuinely under-priced securities and ones that are simply cheap.

Secondly, value investing requires patience. In a bull market it may take time to find undervalued stocks, and once a security is purchased, patience is also required while waiting for the price to rise to its true value. "After all," writes Greenwald, "you bought it because it was out of favor. The market's estimate of its worth doesn't change overnight."

Biases

Given value investing's superior track record, why haven’t investors caught on, bought more value stocks, and created the demand to drive prices up — out of value territory? The answer is "biases" and they identify fertile ground in the
search for under-priced stocks. Understanding biases and qualities that steer many investors away from value stocks (thus lowering demand and prices) can narrow the field of stocks to investigate in greater detail.

Institutional Biases

Many institutional funds have restrictions on what investments they can make:

- Socially irresponsible. Some securities, such as those of tobacco or other companies deemed to be socially irresponsible, may be undervalued if there is a shortage of buyers.
- Size. Many large funds cannot invest in small-cap companies. For example, an investment company wants to invest $5 billion among 100 companies — an average of $50 million in each. But, it also doesn't want to own more than 10% of any one company. Thus, its field is limited to companies with a market capitalization of at least $500 million.

Personal Biases

Herd mentality of institutional managers
Though maverick success may be rewarded, it's safer to stay in the pack. Thus, institutional managers themselves often have biases against value stocks, especially at the end of reporting periods when managers dress up their portfolios by buying popular stocks and dumping unpopular ones.

Human psychology
People remember recent events better than distant ones and often generalize from a few memorable cases rather than incorporate all available data. The problem is that market leadership is transient: over a 2-3 year period winners tend to become losers and vice versa. People dislike risk and hate losing money. We become emotionally biased against stocks that have dropped in price, even though their lower prices have already discounted the negative events that caused the drop in the first place.

Other sources of value stocks
Boring companies don't draw attention from analysts. Also, undesirable companies: in financial distress, burdened with overcapacity, or facing bankruptcy, legislative/regulatory punishment, or lawsuits are often passed over.

Valuation

Of course the trick in value investing is to determine the real value of a security. Only then can you tell if the stock is undervalued or not. So how do we determine the value of a security?

Greenwald states that value can be determined in three ways. The first and most accurate measure is asset value, next is the current earnings power and finally, the third is potential growth. It is important to consider each of these methods.
when determining intrinsic value.

Asset Value

To determine asset value we begin with the balance sheet and adjust or accept the values of each asset group. Then we do the same with the liabilities. Lastly, we subtract liabilities from assets to arrive at the current net asset value. There is virtually no forecasting or discounting.

An analysis of the industry must be incorporated in the asset valuations. If the industry is in permanent decline, assets should be valued at their liquidation value (intangibles being worthless). Otherwise, assets should be valued at reproduction cost (the dollar amount it would take a competitor to enter the field). In Greenwald’s view, most companies are worth the reproduction cost of their assets — no less, no more.

Values in liquidation

The more specialized the asset, the harder it will be to sell, and the more its book value should be reduced. The following are suggested guidelines for adjustments to book values:

- Cash and marketable securities: No adjustment.
- Accounts receivable: 85% of book value.
- Inventory: Start at 50% and adjust for specialization.
- Property, plant and equipment: Start at 45% and adjust for specialization.
- Goodwill: No value. Goodwill, the amount paid in excess of market value for an acquisition, represents items such as customer base and knowledgeable workers. This would only have value if the industry were viable.
- Deferred taxes: No value in liquidation.

Assets for a going concern (replacement cost)

- Cash and (actively traded) marketable securities: No adjustment.
- Accounts receivable: Allow for bad debts
- Inventory: If the company uses LIFO (last in, first out, in which the last units purchased — generally at the highest prices — are the first ones sold), the value of the inventory will be less than the replacement cost. Thus, an adjustment should be done. If a portion of the inventory is less salable (look at increasing days of inventory for clues), an adjustment is necessary.
- Prepaid expenses: No adjustment.
- Deferred taxes: Discounted from planned year of use to present.

Generally, adjustments made to current assets will not be substantial; little time has elapsed for the book and reproduction values to diverge. Fixed assets are quite different in this regard.
Property, plant and equipment

- Property: Land does not depreciate and may be worth much more than its book value. Even if a competitor wouldn't need to spend as much as the market value of a firm's land, that surplus value (like excess cash) should be included.
- Plant: Big adjustments from book values to replacement costs may be required here due to depreciation and inflation.
- Equipment: Case by case; could be an increase or decrease.

Goodwill

This could represent real value or no value at all. If a firm possesses "hidden assets" like loyal customers and established sales channels add a multiple (generally 1-3 years) of the annual sales.

Current Earnings Power

The second most reliable measure of a firm's intrinsic worth is the value of its current earnings, properly adjusted. The equation we use to determine this is:

$$EPV = \text{Adjusted earnings} \times \frac{1}{R}$$

in which EPV is earnings power value and R is the cost of capital.

To adjust earnings we rectify accounting misrepresentations such as recurring "one-time" charges. Then we find the average ratio these charges bear to pre-adjustment earnings and reduce the current year's earnings proportionally. We also replace reported depreciation/amortization with the actual amount spent. And finally, we account for business cycles by decreasing earnings reported at a peak and increasing those reported in a trough.

If the EPV is substantially below its asset value, the firm is either being mismanaged or is in an industry with excess capacity; either way, a value investor will use the lower earnings figure. If the EPV and asset value are roughly equal, there are no competitive advantages. If the EPV is much higher than the asset value, the firm must enjoy significant barriers to entry that can offer protection well into the future. The difference between the asset value and the EPV is the value of the firm's franchise — i.e., that which allows it to earn more than its cost of capital.

Potential Growth

The value of growth, the third and last measurement of a firm's value is rarely considered. Greenwald writes, "For most companies in a competitive market economy, all the value of the growth will be consumed to pay for the additional capital that is necessary to fund the growth." Growth is the most uncertain source of value — and is therefore the most discounted.
The authors present the following equation to determine the present value (PV) of a growing firm:

\[ PV = \text{Capital invested} \times \frac{(\text{ROC} - \text{G})}{(\text{R} - \text{G})} \]

where ROC is the return on capital, G is the growth rate, and R is the cost of capital.

This measurement tool is useful when valuing those rare companies that possess a sustainable competitive advantage and repeatedly exceed market-level earnings on the reproduction value of the assets.

The essential task of the successful value investor is to determine intrinsic value with enough accuracy to take advantage of the market's mispricing. By using these three methods, Asset Value, Current Earnings Power and Potential Growth you will be able to measure the financial situation of a company which will put you on very firm ground when valuing companies.

Now that the authors have given you the tools to determine a company's value, they share insights from the masters.

**Key Ideas of Notable Value Investors**

Benjamin Graham laid the foundation for value investing but over time many successful investors have added to his ideas and created their own styles of value investing. Here are some of the key ideas of the most successful value investors.

**Warren Buffett**

- Likes companies (even selling at a multiple of book value) with strong franchises, high ROE, small need for capital investment, and the ability to distribute cash.
- Invests in companies he understands.
- Avoids companies that depend on technical excellence.
- Likes volatility because irrationally low prices will appear more often.

**Mario Gabelli**

- Favors private market value (PMV) i.e., "the value an informed industrialist would pay to purchase assets with similar characteristics."
- Looks for assets and earnings hidden by GAAP (generally accepted accounting principles).
- Focuses on domestic franchise businesses that generate cash.

**Michael Price**

- Doesn't rely on sell-side analysis (due to investment banks' conflicts of interest) but uses it to understand business segments and to check his
own valuation.

- Values companies based on comparable transactions.
- Likes bankruptcy investing (once the price falls to 30-40% of the firm's value). He tries to own enough stock to have a voice in bankruptcy negotiations but not enough to be an official creditor committee member.

Paul D. Sonkin

- Favors stocks whose prices have recently fallen.
- Looks for over-correcting price drops soon after IPOs.
- Prefers small stocks because they're easier to understand.

Conclusion

Homework and patience are the hallmarks of successful value investors. By analyzing individual low-price stocks in depth to identify discrepancies between intrinsic value and price, those who follow in the footsteps of Graham can capitalize handsomely on the profitable, lonelier corners of the investment world.