Step-by-Step Approach to Value Investing

What is Value Investing?

The concept of value investing was first established by Benjamin Graham, an astute investor who was considered by many as the “Father of Value Investing.” In his classic, *The Intelligent Investor*, Graham emphasizes the importance of investing with a “margin of safety,” an investing concept in which “an investor only purchases securities when market price is significantly below your estimation of the intrinsic value.” The idea of value investing which is centred on this fundamental principle focuses on identifying stocks that are worth more than actual prices reflected in the market.

According to Graham, stock market prices are a reflection of demand & supply, which in turn are driven by irrational market behaviour. For instance, investors may be driven to purchase stocks in times of greed while selling stocks in times of panic, without considering underlying fundamentals or future valuation of companies. Value investors, can profit from market irrationality by buying a stock when it falls below its intrinsic value (undervalued) and make a huge profit when the market corrects itself in the future.

Differences between Value Investing and other forms of investing

<table>
<thead>
<tr>
<th>Investing Approach</th>
<th>Time Frame</th>
<th>Strategy</th>
</tr>
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<tbody>
<tr>
<td>Value Investing</td>
<td>Years</td>
<td>• Selecting stocks that are assumed to be trading below intrinsic value.</td>
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<tr>
<td></td>
<td></td>
<td>• Examine company fundamentals such as ROE, earnings, P/E to estimate a company’s worth</td>
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<tr>
<td>Growth Investing</td>
<td>Months-Years</td>
<td>• Selecting stocks of companies that have high expected growth rate</td>
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<td></td>
<td>• Characterised with high P/E ratios</td>
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<tr>
<td>Trading</td>
<td>Usually short-term (minutes-months)</td>
<td>• Focus on technical analysis (chart patterns, price action, use of indicators etc)</td>
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Criteria for Value Investing

Now that we have established the basis of value investing, let us look at some of the commonly used metrics used by value investors to select companies with strong fundamentals. Note: A basic understanding of financial statements (balance sheet, income statement and statement of cash flows) would be helpful in considering company fundamentals.

1 http://www.investopedia.com/terms/m/marginofsafety.asp
Criteria 1: Strong Return on Equity (ROE)

Return on equity measures a corporation’s profitability by showing how much profit a company generates with the money shareholders have invested.

ROE is expressed as a percentage and calculated as:

\[
\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholder's Equity}}
\]

Value investors use ROE as a profitability measure to gauge how well a company has performed over time. A high and consistent ROE indicates that the company has a sustainable competitive advantage. Companies that are able to consistently generate a 5 year ROE average of 15% are good investment candidates. The world’s greatest investor himself, Warren Buffet, considers ROE as an important profitability metric to determine whether a company is investing excess cash wisely.

However, it is important to know that ROE does not reflect if a company has excessive debt and is raising more funds from borrowing than issuing shares. Companies which have high debt-to-equity ratios tend to have higher ROEs. This might make these companies look profitable in the long run with respect to its ROE, but it also elevates risks as the debt to equity ratio has increased as well.

Where to find information for ROE?

- Net income: Income Statement
- Shareholder’s Equity: Balance Sheet

Criteria 2: Low Debt to Equity Ratio

For this reason, ROE should never be considered in isolation without taking Debt/Equity ratio into account. ROE measure a company’s financial leverage by dividing its total liabilities by stockholder’s equity.

\[
\text{D/E Ratio} = \frac{\text{Total Liabilities}}{\text{Shareholders Equity}}
\]

The D/E ratio indicates what proportion of debt and equity the company is using to finance its assets. While debt is not necessarily a bad thing (since companies may finance a project with debt to increase shareholder returns), excessive leverage exposes a company to huge risks particularly during a recession. According to Motley Fool, a rule of thumb would be selecting companies with a D/E ratio of less than 30%.

Where to find information for D/E ratio?

- Balance Sheet
Criteria 3: Low Price/Earnings Ratio

This is probably one of the most commonly used metric in value investing. Investors can use a stock’s P/E to determine how much they are paying for a company’s earning power.

\[ \text{P/E Ratio} = \frac{\text{Price per share}}{\text{Earnings per share}} \]

A stock’s P/E ratio fluctuates constantly from changes in its price. By knowing the P/E for each stock, we can see whether the stock is selling at a good price or not. If stock A sells for $50 while stock B sells for $100, which would be a better investment? Simply looking at stock prices would not provide sufficient insight to whether a stock is worth purchasing. Suppose we know that stock A generates $5 in earnings while stock B generates $20 in earnings, we know that stock B which has a lower P/E offers better value because you are buying more earnings power for a given price. It is risker to invest in a stock that has a high P/E than a low P/E since one would expect to get higher earnings growth for that extra money paid for the stock. It is also worth noting that mature companies (blue-chip stocks) with low P/E often pay dividends while new, emerging companies with high P/E usually do not. I would recommend selecting companies with a P/E of <15.

Where to find information for P/E ratio?
- Market Price: Anywhere online!
- Earnings per share (Net income/no. of shares outstanding): Income statement

Criteria 4: Low Price/Sales Ratio

While P/E compares prices to earnings, P/S compares price to sales revenue.

\[ \text{P/S Ratio} = \frac{\text{Price}}{\text{Sales Revenue}} \]

Although P/E ratio is commonly used, companies can manipulate earnings in various ways (to find out how companies exaggerate earnings you may consider reading Financial Shenanigans by Jeremy Perler). While managers can use accounting rules to get desired earnings, sales revenue cannot be adjusted significantly. In his book What Works on Wall Street by James O’Shaughnessy, he gathered popular stock measures like the P/E ratio, P/B ratio and relative price strength to see how they fared over the years when used to find both large and small companies. Based on his study, he found P/S more reliable than P/E as a tool to measure value for companies of all sizes. O’Shaughnessy recommends selecting stocks which has a P/S < 1.5

Where to find information for P/S ratio?
- Market Price: Anywhere online!
- Sales Revenue: Income Statement
Criteria 5: Low Price/Book Ratio

P/B compares a stock’s price to how much the stock is worth right now if somebody liquidated the company.

\[
P/B \text{ Ratio: Price}/(\text{Total Assets} - \text{Intangible Assets and Liabilities})
\]

If the ratio is less than 1, that means you are paying less for the stock that its liquidation value. A lower P/B ratio could either mean that the stock is undervalued or the fundamental economics of the business have deteriorated and the market is now pricing this new valuation (lower price) to reflect the firm’s weaker fundamentals.

Graham recommends investors to buy stocks with a margin of safety, of which he encouraged investors to buy a stock for no more than \(2/3\) of its book value (P/B<0.66). That means one should not pay more than $66 for a company that has a book value of $100. Graham requires the low P/B to accompany a low P/E as well. By purchasing stocks that are cheap compared to its actual worth, investors can ignore market fluctuations. I use a P/B of around 1 to screen for potential investments.

Where to find information for P/B Ratio:
- Market Price: Anywhere online!
- Book Value: Balance Sheet

Criteria 6: Increasing Sales, Profits and Positive Cash Flow

Philip Fisher wrote that investors should purchases businesses with the ability to grow sales and profits over the years at rates greater than their industry average. A company that is able to consistently generate increasing sales and earnings within the last 5 years and increasing cash flow is likely to exhibit strong performance in the long run. Having cash reserves and a positive cash flow are huge advantages.

Where to find information for Increasing Sales, Profits and Positive Cash Flow:
- Sales Revenue, Profits: Income Statement
- Cash Flow (Operating Activities): Statement of Cash Flows

Criteria 7: Sustainable Competitive Advantage (Have Economic Moat)

The term “Economic Moat” was coined by Warren Buffet describing a company’s competitive advantage over others in the same industry. In fact, this is the most important thing Buffet looks for when evaluating a company and is undoubtedly the key to his phenomenal success. In an interview with Fortune magazine, Buffet quoted:

“The key to investing is not assessing how much an industry is going to affect society, or how much it will grow, but rather 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. “

By investing in a company that has a strong and sustainable competitive advantage, we can foresee a gradual increase in earnings and stock prices. Some characteristics of companies which have a strong economic moat include:

- Strong Economies of Scale (Wal-Mart)
- Strong Brand (Apple, Starbucks, Google)
- High Switching Costs (Microsoft)
- Intellectual Property Rights (Merck, Nike)
- High profit margins

**Criteria 8: Look for Insider Stock Ownership and Company Buybacks**

When managers themselves are shareholders, there is a compelling reason for them to make decisions in the best interests of all shareholders. To quote Peter Lynch, “There’s only one reason that insiders buy: They think the stock price is undervalued and will eventually go up.” In addition to stock ownership, we would also want the company to buy back its own shares. By engaging in stock buyback, it decreases the number of shares outstanding (in circulation) which in turn, increases the company’s earnings per share. For an given price, higher earnings would translate into a lower P/E, which increases the stock’s value.

### Summary for Value Investing Criteria

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>What we are looking for</th>
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<tbody>
<tr>
<td>1</td>
<td>Strong ROE</td>
<td>&gt;15% 5-year average</td>
</tr>
<tr>
<td>2</td>
<td>Low D/E</td>
<td>&lt;0.30</td>
</tr>
<tr>
<td>3</td>
<td>Low P/E</td>
<td>&lt;15</td>
</tr>
<tr>
<td>4</td>
<td>Low P/S</td>
<td>&lt;1.5</td>
</tr>
<tr>
<td>5</td>
<td>Low P/B</td>
<td>Around 1</td>
</tr>
<tr>
<td>6</td>
<td>Increasing Sales, Profits and Positive Cash Flow</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Sustainable Competitive Advantage</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Insider Ownership and Buyback</td>
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</tbody>
</table>

While selecting potential candidates for investment may seem like an arduous task, most of these ratios/performance metrics are easily obtainable in most stock databases and on the Internet.

**Stock Screening Application**

Now that I have identified a list of criteria we can use to select value stocks, let us put what we have learnt into practice. For this exercise, I will be using Google Finance to screen for stocks ([https://www.google.com/finance#stockscreener](https://www.google.com/finance#stockscreener)).
Alternatively, Reuters and Yahoo! Finance provides a comprehensive summary of the important financials/ratios required (http://www.reuters.com/finance/stocks/).

Using Google Finance, I am able to include most of the criteria to filter out potential value stocks. I have also included another criteria “Market cap” to find out the size of the company. Large-cap companies that generate consistent profits are more likely to have a strong economic moat as compared to mid-cap/small-cap companies.

To find out whether a company is generating positive cash flow, refer to the Statement of Cash-Flows. (Available on Yahoo! Finance- Go Financials > Cash Flow).

Information on insider ownership and buyback can be obtained on Yahoo! Finance as well.

Conclusion

By establishing a set of measurements for your investment strategy, you will be able to avoid the common emotional traps of greed and fear. To quote Warren Buffet, “"We don’t have to be smarter than the rest. We have to be more disciplined than the rest." I wish you success in your value investing journey and if you are interested in learning more about value investing, I would highly recommend you to start by reading the following:

1) The Neatest Little Guide to Stock Market Investing, Jason Kelly
2) The Secrets of Millionaire Investors, Adam Khoo