## Value Investing Strategy Framework

## Executive Summary

- Value investing is a cornerstone of active security selection and traces its roots to Benjamin Graham who associated value with a margin of safety, which enables the investment to withstand adverse business developments.
- Value investing is a proven approach which has historically generated returns above the market average. This excess performance of value stocks over the long term has been termed the "value premium".
- According to behavioral finance, value strategies may benefit through being contrarian to other "naïve" strategies followed by investors. Such strategies include extrapolating past earnings growth too far into the future, assuming a trend in stock prices, overreacting to good or bad news, or simply equating a good investment with a well-run company irrespective of price. Investors' systematic errors in predicting future earnings growth of value stocks, and investors' excessive pessimism about these stocks support the excess performance of value stocks relative to growth stocks, over the longer term.
- AQM has found that a focus on free cash flow (FCF) is useful in reducing investment risk and avoiding value traps. FCF is a more comprehensive measure of profitability than earnings and is more difficult to manipulate through accounting measures.
- Companies with strong cash flow may capitalize on market opportunities and may also better ride out economic storms than those with weaker cash flows. Companies with large cash flows may also be able to better finance growth and reward shareholders through dividends and share repurchases.


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## What is Value Investing?

Value investors seek to buy stocks of companies that they believe the market has undervalued. Commonly, value investors select stocks with lower-than-average price-to-earnings or price-to-book ratios or higher dividend yields. Despite the different approaches, value investors focus on "cheapness": stocks are selected based on the ratio between market prices and some measure of fundamental value such as earnings or assets.

Value investing is a cornerstone of active security selection and traces its roots to Benjamin Graham who associated value with a margin of safety, which enables the investment to withstand adverse business developments. More importantly, value investing is a proven approach which has historically generated returns above the market average. This excess performance of value stocks over the long term has been termed the "value premium".

FIGURE 1. Growth of \$1 Invested (log scale)


Source: Kenneth French, As of $1 / 31 / 2021$. Universe ranked into five quintiles by book-to-price.

Figure 1 illustrates the value premium using the FamaFrench data. Over the 1926-2020 period, value stocks (defined as the top $20 \%$ of the universe by $\mathrm{B} / \mathrm{P}$ ) had an annualized return of $12.7 \%$ outperforming growth stocks (defined as the bottom $20 \%$ by B/P) 290bps per annum.

Some academics and practitioners contend that the value premium is a compensation for investors bearing distress risk. Some others - including AQM - embrace a behavioral explanation: value strategies might work because they are contrarian to naïve strategies followed by other investors.

Such strategies include extrapolating past earnings growth too far into the future, assuming a trend in stock prices, overreacting to good or bad news, or simply equating a good investment with a well-run company irrespective of price. Regardless of the reason, some investors tend to favor and invest in growth companies with high growth rates thus bidding up their prices and market multiples above their intrinsic value. Conversely, they overreact to stocks that have recently done poorly, pushing down their prices and compressing their multiples below their intrinsic value. Investors' systematic errors in predicting future earnings growth of value stocks, and investors' excessive pessimism about these stocks support the excess performance of value stocks relative to growth stocks over the longer term.

While the very long term still support the value premium, the most recent two decades have seen a significant erosion of the value premium as growth stocks have performed exceptionally well. A comparison of the large cap Russell Growth and Value indexes over the 1970-2020 period shows that the value premium has practically disappeared due to the sustained and significant out-performance of growth stocks (Figure 2). The shrinking of the value premium is to be partly attributed to the declining relevance of book value as a measure of value. The growing importance of intangible assets and intellectual capital is not reflected in the book value. Thus, low price-tobook is more likely to be the result of financial distress and or declining profitability rather than undiscovered value. This shortcoming of book value can be addressed through a focus on free cash flow-based valuation.

FIGURE 2. Russell Style Indexes 01/1979-10/2020


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## Designing a Value Strategy

Value investors earn excess returns by taking a contrarian view of stocks trading at low market valuations that may be due to the market's unwarranted pessimism on their growth prospects. In practice though, value investing presents two major challenges: a) avoiding value traps; b) ability to withstand short-term volatility.

While a risk to growth investing is price risk (risk to overpay), the primary risk with value stocks is business risk. In fact, low market multiples are often a result of negative business trends reflected in low growth rates and deterioration of profitability.

Thus, a value trap is a stock that appears attractive on a valuation basis but whose business performance never improves.

Investors who employ traditional valuation metrics such as price-to-earnings and price-to-book ratios may be more likely to fall in a value trap than investors who focus on cash flows.

Specifically, AQM believes that a focus on free cash flow (FCF) may reduce investment risk and avoiding value traps. FCF - defined as operating cash flow minus capital expenditures - is a more comprehensive measure of profitability than earnings as it includes working capital necessary to run the business and capital expenditures needed to maintain and expand operations. FCF is also more difficult to manipulate as it removes the discretionary accounting component of accruals that can distort earnings.

Companies with strong cash flow may capitalize on market opportunities and may also better ride out economic storms than firms with weaker cash flows. Companies with large cash flow may also be able to better finance growth and reward shareholders through dividends and share repurchases.

Cash flow generating power should be assessed in conjunction with debt leverage in order to adjust the FCF-based valuation multiple to reflect the overall enterprise value. This methodology penalizes companies that are over-leveraged and rewards companies with an attractive combination of large free cash flow , low debt and high cash balances.

Value stocks may display weak fundamentals or recent earnings disappointments, contributing to the high uncertainty surrounding their prospects. This business uncertainty results in high price volatility. Due to the potential to over-react to market fluctuations and the emotional nature of investing, AQM believes that a structured, disciplined investment process is key to successful value investing.
Figure 3 and Figure 4 corroborate AQM analysis by quantifying the superiority of FCF as a measure of value versus book value and earnings.

Over the period under study (1990-2020), FCF yield has displayed a much higher information coefficient. ${ }^{1}$

It's insightful to note that FCF yield has a modest correlation with earnings yield and virtually zero with book yield.
Figure 3. Data and Information Coefficient Correlation

|  | Factor Data Correlation |  |  | ICs |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Factor | FCF <br> Yield | Earnings <br> Yield | Book <br> Yield | Info <br> Coeff | FCF <br> Yield | Earnings <br> Yield | Book <br> Yield |
| FCF Yield | 1.00 | 0.23 | -0.11 | 0.04 | 1.00 | 0.31 | 0.03 |
| Earnings Yield | 0.23 | 1.00 | 0.20 | 0.01 | 0.31 | 1.00 | 0.31 |
| Book Yield | -0.11 | 0.20 | 1.00 | 0.01 | 0.03 | 0.31 | 1.00 |

Source: Alpha Quant Models, FactSet.
S\&P 500 universe, quarterly rebalance over 1990-2020.
The top-bottom spread returns (Figure 4) demonstrates how FCF yield has been and continues to be an excellent factor to identify future outperformers.

Figure 4. Top-Bottom Decile Spread by Value Factor (log scale)


Source: Alpha Quant Models, FactSet. As of 9/30/2020.

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[^0]:    Source: FactSet. As of 10/31/2020.

[^1]:    ${ }^{1}$ The information coefficient is the correlation between the factor ranks and the future returns. It quantifies the ability of a factor or model to distinguish identify future outperformers from underperformers.

