

# Sabino Investment Management, LLC

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## THE ADVANTAGE OF VALUE INVESTING

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### Investment Styles for Common Stocks

There are five major investment styles for investors in common stocks: value, growth, momentum, indexing, and factor investing.

Value investors seek to purchase a portion of a business for a price below its intrinsic value. The intrinsic value of a company may be based on either (or both) the value of its net assets or the ability of the company to generate future earnings and cash flow.

Growth investors attempt to purchase stocks that have high expected future growth rates. Some growth investors are more disciplined with regard to the price they are willing to pay for future growth. They seek growth at a reasonable price (GARP). While their emphasis may be different, GARP investors are essentially equivalent to value investors who seek future earnings growth.

Momentum investors seek stocks that have experienced recent acceleration in earnings or upward price movement. The theory behind momentum investing is that stocks that have done well in the recent past will continue to do well.

Indexing has become more popular as some investors choose to accept modest under-performance relative to a chosen index in return for low management fees and transaction costs. An index fund is designed to track the performance of a specific bond or stock market index such as the S&P 500. An index fund will have a tendency to under-perform its targeted index because there will be management fees and transaction costs for the fund which are not reflected in the targeted index. Indexing is a passive strategy which makes no attempt to identify undervalued or overvalued stocks.

Factor investing is generally based upon one or more quantifiable criteria to achieve marginally better returns than a true market-weighted index. MSCI Inc. describes a factor as “any characteristic relating to a group of securities that is important in explaining their returns and risk.” Some systematic factors that have been identified in the financial literature are: value, low size (small cap), momentum, low volatility, dividend yield, and quality. While factor investing may include value and/or momentum criteria, it is generally a quantitative, data mining approach with little allowance for qualitative considerations.

## **Is style a key determinant of investment returns?**

There have been numerous empirical studies that indicate that investment style does make a difference in investment returns. As a result, some financial academics are beginning to abandon the prior acceptance of efficient market theory and are offering alternative theories.

The efficient market hypothesis states that prices of securities fully reflect available information. The implication is that one cannot beat the market except by chance and that investors should strive only to develop a broadly diversified portfolio weighted on the basis of current market values. The only relevant measure of risk under efficient market theory is beta – a measure of the tendency of a security's price to respond to price changes of a broad-based market index. Accounting based measurements of risk are not relevant because all information about a company is already reflected in the price of their securities.

Advocates of the new finance offer evidence that the financial markets are inefficient and that investors can take advantage of these systematic inefficiencies to generate superior returns.

## **What Empirical Studies Show**

There have been numerous studies on the subject of value versus growth investment strategies. Table 1 summarizes eleven of the studies on the subject. The studies cover different time periods and different stock universes. Two of the studies include foreign stocks. The Bauman, Conover, and Miller study is the most comprehensive with regard to international stocks and includes 2800 stocks in 21 countries over a ten year time period.

The most common variables which were tested were price/book value (P/BV), price/earnings (P/E), and price/cash flow (P/CF). Other variables that were tested included price/sales (P/S), price/depreciation, earnings growth rates, sales growth rates, and dividend yield. Stocks with a low price relative to book value, earnings, cash flow, or sales were considered to be value stocks while those with high ratios were considered to be growth stocks. Stocks with high dividend yields were also considered to be value stocks.

The studies utilized similar methodologies with regard to the testing of variables. Table 1 shows the types of companies included in the studies, how they were grouped, the frequency of rebalancing and the variables tested. Stocks in the selected universe for the studies were ranked on the basis of the independent variables to be tested. Portfolios were then formed by grouping stocks on the basis of the rankings. After a certain period of time, stocks were then ranked again and the portfolios were rebalanced accordingly. The returns on the various portfolios were then compared.

The results of all eleven studies were consistent. When value portfolios (stocks with the lowest P/E, P/BV, etc.) were compared to growth portfolios (stocks with the highest P/E, P/BV, etc.), the value portfolios outperformed the growth portfolios in all eleven studies. The value portfolios were also compared to a benchmark index in nine of the eleven studies

and outperformed the benchmark in all of the nine studies. This held true for all of the variables in the various studies that were used to identify value stocks. Several studies compared investment returns after different time periods. For purposes of comparison in Table 1, all differences in investment returns shown are after one year.

There was no one variable that appeared to be better than the others in identifying value stocks that outperformed the market. For the Nicholson study, price/earnings was a better indicator of value than price/sales. In the Lakonishok, Schleifer, and Vishny study, price/cash flow was a better indicator of value than price/earnings or price/book value. In the Calderwood study, value stocks selected on the basis of high dividend yield outperformed those selected on the basis of price/book or price/earnings by a small margin. In the Bauman, Conover & Miller study, price/book value was a better indicator of value than price/earnings, price/cash flow, or dividend yield.

The Calderwood study also tested a combination of the three variables. Some stocks were ranked in the top 30% for all three criteria: high dividend yield, low price/book value, and low price/earnings. The portfolio of stocks which satisfied all three screening criteria outperformed the portfolios which were ranked on the basis of only one variable. It appears as though a screening process for identifying value stocks should include more than one variable.

### **Higher Returns with Less Risk?**

Several of the studies considered risk as measured by beta and standard deviation. Beta is a measure of systematic risk - the tendency of the price of a security to respond to price changes in the broad market. Standard deviation is a measure of dispersion from the mean return of the security. There was little, if any, evidence to support the view that value strategies involve more risk. In fact, Fama & French found evidence to the contrary - stocks with low price/book value ratios actually had lower betas.

### **Reversion to the Mean**

Attempts to explain the persistent advantage of value stocks over growth stocks focus on reversion to the mean. In pricing a security, investors and analysts naturally take into consideration the expected future growth rates of the company. As future growth rates are difficult to predict, investors and analysts often extrapolate from past growth rates. This process of estimating growth tends to ignore the tendency of corporate profit growth to revert to the mean.

This phenomenon was clearly demonstrated in a study by Fuller, Huberts, and Levinson. While growth stocks initially experience higher growth rates than value stocks, the higher growth rates do not last long enough to justify the higher price/earnings multiples which growth investors have been willing to pay. As Table 1 indicates the stocks were ranked by P/E ratios and divided into quintiles. For the eighteen years ending in March 1991, the

lowest P/E quintile outperformed the highest P/E quintile by 8.0% on an annualized, risk-adjusted basis. The quintile with the lowest P/E ratios had a mean ratio of 6.1 while the quintile with the highest P/E ratios had a mean ratio of 44.9.

Fuller, et al. analyzed the earnings per share (EPS) growth of the different quintiles after each of eight years. After one year, the highest P/E quintile had EPS growth which exceeded the lowest P/E quintile by 18.5%. In years 2 and 3, this EPS growth advantage declined to 7.0% and 3.6%, respectively. For years 4 and 5, the EPS growth advantage was in the 2-3% range. For years 6 through 8, the EPS growth advantage was in the 1-2% range. The earnings growth rates converged close to the mean after only four years. The P/E ratios of the quintiles implied longer periods of high growth for high P/E stocks or low growth for low P/E stocks than what the companies actually experienced.

Earnings growth rates tend to revert to the mean quickly because of the nature of the capital markets. Industries which are experiencing high growth rates tend to attract competition and capital investment by other firms. This competitive process eventually results in lower returns on equity and lower earnings growth rates. Conversely, industries with low growth rates do not attract much new capital investment and management may attempt to achieve higher earnings by operating more efficiently. Thus, the earnings growth rates of both high and low growth companies tend to revert to the mean.

### **Will the Value Investing Advantage Continue?**

Several researchers expect the value investing advantage to continue based upon human behavior. Lakonishok et al. suggest that investors put excessive weight on the recent past in attempting to predict the future. This is a common judgement error in psychological experiments and may explain investor preference for glamour stocks. They also suggest that institutions prefer glamour stocks and are willing to pay a premium for them because they appear to be "prudent" investments. They are easy to justify to sponsors, who erroneously equate high growth companies with good investments.

### **Summary**

Five major investment styles for investors in common stocks are value, growth, momentum, indexing, and factor investing. This article reviewed eleven major studies on the investment performance of value and growth investment strategies. The results of all eleven studies were consistent. Value investing strategies outperformed growth strategies. This held true regardless of which variable was used to identify value stocks. Variables that were used to identify value stocks included price/earnings, price/book value, price/cash flow, price/free cash flow, and dividend yield. None of the studies found evidence to support the view that value strategies involve more risk.

Although growth stocks initially experience higher growth rates than value stocks, the growth rates of both quickly revert toward the mean. When investing in stocks, investors

demonstrate over-optimism for growth stocks and over-pessimism for value stocks. Several researchers expect the value investing advantage to continue, based upon the persistent nature of human behavior.

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**TABLE 1**  
**A SUMMARY OF EMPIRICAL STUDIES**  
**VALUE VS. GROWTH STOCKS**

Author	Period of Study	Data Source	Types of Companies	Variables Tested	Grouped by	Frequency of Rebalancing	Value-Growth* after one year	Value-Benchmark
S. F. Nicholson	1937 - 1963	Studley Shupert & Co industry summaries	189 companies in 18 industries excluding bank, insurance, utility and transportation cos.	Price/Earnings, Price/Sales, Price/Depreciation	Quintiles	Annual	for P/E=13%, for P/S=2%, for P/D=3%	vs. mid quintile 9%
S. Basu	9/1956 - 8/1971	Compustat and CRSP	1400 NYSE traded industrial cos	Price/Earnings	Quintiles	Annual	for P/E = 6.75%	vs. sample 4.19%
J. Lakonishok, A. Schleifer, W. Vishny	1963 - 1990	Compustat and CRSP	NYSE and AMEX	Price/Book Value, Price/Cash Flow, Price/Earnings, Sales Growth Rate	Deciles	Annual	for P/B = 4.5%, for P/CF=8.4%, for P/E=3.1%, for SGR=4.9%	size adjusted returns: for P/B=2.3%, for P/CF=3.5%, for P/E=1.2%, for SGR=2.1%
R. Fuller, L. Huberts, M. Levinson	1973 - 1990	Compustat and Barra	approximately 1,000 largest market capitalization stocks	Price/Earnings	Quintiles	Annual	for P/E=8.0%	vs. mid-quintile: for P/E = 3.1%
D. Dreman & M. Berry	1/1973 - 3/1993	Abel Noser database and Compustat	995 companies	Price/Earnings	20%/60%/20%	Annual	for P/E = 9.8%	vs. total sample for P/E = 5.2%
K. Hackel, J. Livnat & A. Rai	1978 - 1991	Compustat and CRSP	NYSE, AMEX and NASDAQ; Numerous screening criteria (56-131 stocks)	Price/Free Cash Flow	One Portfolio	Annual		vs. CRSP Index for P/FCF = 7.0%
S. Calderwood	1981 - 1994	S&P	S&P 500 stocks	Dividend Yield, Price/Book Value, Price/Earnings	One Portfolio - 30%	Quarter		vs. S&P 500: for DY=5.0%, for P/B=4.8%, for P/E=4.2%, for Combined=6.8%
C. Capaul, I. Rowley & W. Sharpe	1/1981 - 6/1992	S&P/Barra and Union Bank of Switzerland	Indexes for France, Germany, Switzerland, UK, Japan, USA	Price/Book Value	Two Groups	Semiannual	for P/B = 3.4%	
R. Harris & F. Marston	7/1982 - 12/1989	Compustat, CRSP and IBES	600 companies	Price/Book Value, Earnings Growth Rate	30%/40%/30%	Month	for P/B = 3.9%, for EGR = 0.4%	vs. total sample: for P/B = 3.9%, for EGR = 0.4%
W. Bauman, C. Conover, & R. Miller	1986 - 1996	Compustat Global Vantage	21 countries, approx 2,800 stocks	Price/Earnings, Price/Cash Flow, Price/Book Value, Dividend Yield	Quartiles	Annual	for P/E = 4.4%, for P/CF=4.3%, for P/BV=5.7%, for DY=4.8%	
E. Fama & K. French	7/1963 - 12/1990	CRSP-Compustat	NYSE, AMEX and NASDAQ	Beta, Market Capitalization, Price/Book Value, Price/Earnings	Deciles	Annual	for small market cap = 6.9%, for Price/Book = 11.8%	vs. CRSP Index for small market cap = 2.8%, for Price/Book = 4.8%

\* Difference between lowest and highest grouping after one year.