WHY VALUE INVESTING SUCKS

Prepared: 8/10/2017

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Value Investing is Awesome!





The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Please see disclosures for additional information. Additional information regarding the construction of these results is available upon request. 1963 to 2016.

Invert. Always Invert.





Why Value Investing Sucks

Stepping back a bit...

What IS the "Value Premium?"



What is the "Value Premium?"

Spread between expensive and cheap stocks based on some valuation metric

Valuation Metric CAGR Performance (1971-2010)

	EBITDA/		FCF/	GP/		VW	
	E/M	TEV	TEV	TEV	B/M	Mkt	
Expensive	9.26%	8.16%	9.76%	7.83%	9.15%	10.09%	
	10.81%	8.97%	10.10%	9.77%	10.61%	10.09%	
Average	10.42%	9.91%	10.60%	11.29%	10.82%	10.09%	
	11.98%	12.56%	10.74%	13.84%	12.41%	10.09%	
Cheap	13.62%	14.39%	13.70%	14.97%	13.62%	10.09%	
Spread	4.37%	6.23%	3.94%	7.14%	4.47%	N/A	
1							



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Source: Gray and Vogel, 2012, Analyzing Valuation Measures: A Performance Horse Race over the Past 40 Years, *The Journal of Portfolio Management* 39, p. 112-121.

What **Drives** the Value Premium?

Extra Risk?

Mispricing?



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CHICAG

alpha architect

Markets are efficient.

Shiller

No they aren't! People are insane.

ICAGO



Because **people are insane**!



Yes they are!

Why can nobody

beat the market?

Finance professors aren't billionaires for a reason...

Who is the Worst Poker Player at the Table?



Who is the Best Poker Player at the Table?



Value Investing is Simple, but <u>CANNOT</u> be Easy

Who is the Worst Poker Player at the Table?



Who is the Best Poker Player at the Table?



What Drives the Value Premium?

Q: Is the value premium driven by risk and/or mispricing? **A:** <u>Likely both</u>. Here is the mispricing argument.





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Who is the Worst Poker Player at the Table?



Who is the Best Poker Player at the Table?



Delegated Asset Management: A Principal-Agent Problem







Relative Performance Destroys Careers

Career Risk is Real



Sustainable Investing <u>Requires</u> Perspective



Source: <u>http://online.barrons.com/news/articles/SB945992010127068546</u>; Calculation details available upon request. *The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Please see disclosures for additional information. Additional information regarding the construction of these results is available upon request.

Generic Value Factor: 1963 to 2016



Common: 5 YEARS of Relative Pain.



Generic Value Factor Spread (Val-SP): 1963 to 2016



Return drag is real: Raises <u>Behavioral Risk</u>

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Value involves risk and being different



Risk is painful. Being different is painful.

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Patience and Discipline is "Alpha"





Value Investor

"This time is different" investors

Benchmark huggers

<u>Pissed Off</u> Clients "IPOs kick ass!"

"The quants have changed the game"

> "Winner take all economy"

"Valuations don't matter"

"My Tech stocks are <u>crushing you</u>!"



Why Endure So Much Pain???



QUESTIONS?

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APPENDIX



Firm Mission

We Empower Investors Through Education







In order to

Develop <u>Sustainable</u> Investors



Quick Background on Our Firm



- Systematic Asset Management
- Majority Employee-Owned
- Quantitative Research Focused
- Fast Growing with \$550mm AUM
- Gaining Mainstream Recognition



We Deliver <u>Focused</u> Factor Exposures

alpha architect

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Job Security or Alpha?

Answer: Pick one.



Long-only generic value portfolios: CAGR

A	pha?								
		Number of Stocks Selected each month							
		50	100	150	200	250	300	500	Universe
Holding Period for each Stock	1	15.70%	15.13%	15.34%	14.72%	14.20%	13.73%	12.44%	10.23%
	2	15.22%	14.96%	14.94%	14.40%	13.90%	13.49%	12.31%	10.23%
	3	15.06%	15.11%	14.79%	14.26%	13.66%	13.35%	12.29%	10.23%
	4	14.80%	14.98%	14.65%	14.13%	13.57%	13.31%	12.25%	10.23%
	5	14.63%	14.74%	14.39%	13.96%	13.45%	13.21%	12.18%	10.23%
	6	14.49%	14.46%	14.09%	13.73%	13.29%	13.09%	12.17%	10.23%
	7	14.33%	14.36%	13.85%	13.64%	13.23%	13.04%	12.17%	10.23%
	8	14.32%	14.26%	13.74%	13.60%	13.16%	13.00%	12.19%	10.23%
	9	14.36%	14.21%	13.72%	13.53%	13.12%	12.98%	12.19%	10.23%
	10	14.36%	14.15%	13.72%	13.52%	13.15%	13.01%	12.21%	10.23%
	11	14.43%	14.18%	13.73%	13.53%	13.18%	13.04%	12.24%	10.23%
	12	14.44%	14.24%	13.73%	13.54%	13.19%	13.06%	12.29%	10.23%

Security?

→Closet-Indexing <u>Decreases</u> Expected Performance



*The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Additional information regarding the construction of these results is available upon request. Sample is from 1970 to 2016. Results are associated with a generic cheap EBIT/TEV index strategy. Indexes are unmanaged, do not reflect management or trading fees, and one cannot invest directly in an index. All returns are gross total returns and include the reinvestment of distributions (e.g., dividends).

Security?

Long-only generic value portfolios: Tracking Error

		Number of Stocks Selected each month						
		50	100	150	200	250	300	500
olding Period for each Stock	1	10.54%	8.65%	7.74%	6.96%	6.37%	5.95%	4.76%
	2	10.30%	8.44%	7.55%	6.82%	6.22%	5.84%	4.69%
	3	10.03%	8.31%	7.38%	6.68%	6.11%	5.73%	4.65%
	4	9.76%	8.18%	7.24%	6.57%	6.03%	5.67%	4.60%
	5	9.59%	8.08%	7.16%	6.47%	5.96%	5.63%	4.57%
	6	9.50%	8.01%	7.09%	6.39%	5.89%	5.57%	4.54%
	7	9.38%	7.93%	7.03%	6.33%	5.83%	5.52%	4.52%
	8	9.29%	7.88%	6.99%	6.27%	5.78%	5.47%	4.50%
	9	9.24%	7.82%	6.94%	6.22%	5.75%	5.43%	4.48%
	10	9.19%	7.77%	6.89%	6.18%	5.71%	5.39%	4.46%
	11	9.15%	7.73%	6.86%	6.15%	5.69%	5.36%	4.44%
Ĭ	12	9.11%	7.69%	6.81%	6.12%	5.67%	5.32%	4.42%

Alpha?

→Closet-Indexing Increases Job Security



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Time for a Game: Let's Spot the Closet Indexers

https://tools.alphaarchitect.com/



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Reminder:

Patience and Discipline is "Alpha"





IMPORTANT INFORMATION - DISCLOSURES

There are risks involved with investing, including loss of principal. There is no assurance that the objectives of any strategy or fund will be achieved or will be successful. No investment strategy, including diversification, can protect against market risk or loss. Current and future portfolio holdings are subject to risk. Past performance does not guarantee future results.

There is a risk of substantial loss associated with trading commodities, futures, options and other financial instruments. Before trading, investors should carefully consider their financial position and risk tolerance to determine if the proposed trading style is appropriate. Investors should realize that when trading futures, commodities and/or granting/writing options one could lose the full balance of their account. It is also possible to lose more than the initial deposit when trading futures and/or granting/writing options. All funds committed to such a trading strategy should be purely risk capital.

Certain economic and market information contained herein has been obtained from published sources prepared by other parties, which in certain cases have not been updated through the date hereof. While such sources are believed to be reliable, neither Alpha Architect nor its affiliates assumes any responsibility for the accuracy or completeness of such information and such information has not been independently verified by Alpha Architect.

Index returns are for illustrative purposes only and do not represent actual fund performance. References to an index do not imply that the portfolio will achieve returns, volatility or other results similar to that index. The composition of the index may not reflect the manner in which a portfolio is constructed in relation to expected or achieved returns, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility or tracking error targets, all of which are subject to change. Index performance returns do not reflect any management fees, transaction costs, or expenses, which would reduce returns.

Indexes are unmanaged and one cannot invest directly in an index. There are no active components of indexes; therefore, using them as a proxy can be of limited value because there is no guarantee that the portfolio would have been managed to match the index. Realized returns and/or volatility may come in higher or lower than expected.

Annual performance is calculated based on monthly return streams, geometrically linked as of the end of the specified month end.

Results, unless cited otherwise, are shown gross of fees and do not reflect the effect of investment fees which would lower performance. Performance reflects the reinvestment of dividends and other earnings. The following hypothetical illustrates the compound effect fees have on investment return: For an account charged 1% with a stated annual return of 10%, the net total return before taxes would be reduced from 10% to 9%. A ten year investment of \$100,000 at 10% would grow to \$259,374, and at 9%, to \$236,736 before taxes. For a complete description of all fees and expenses, please refer to Alpha Architect's Form ADV Part 2A.



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Past performance is not indicative of future results, which may vary.

Hypothetical performance results (e.g., quantitative backtests) have many inherent limitations, some of which, but not all, are described herein. No representation is being made that any fund or account will or is likely to achieve profits or losses similar to those shown herein. In fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently realized by any particular trading program. One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or adhere to a particular trading program in spite of trading losses are material points which can adversely affect actual trading results. The hypothetical performance results contained herein represent the application of the quantitative models as currently in effect on the date first written above and there can be no assurance that the models will remain the same in the future or that an application of the current models in the future will produce similar results because the relevant market and economic conditions that prevailed during the hypothetical performance period will not necessarily recur. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the preparation of hypothetical performance results, all of which can adversely affect actual trading results are presented for illustrative purposes only.

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IMPORTANT INFORMATION - DEFINITIONS

- > CAGR: Compound annual growth rate
- > **Standard Deviation:** Sample standard deviation
- Downside Deviation: Sample standard deviation, but only monthly observations below 41.67bps (5%/12) are included in the calculation
- > Sharpe Ratio (annualized): Average monthly return minus treasury bills divided by standard deviation
- > Sortino Ratio (annualized): Average monthly return minus treasury bills divided by downside deviation
- > Appraisal Ratio (annualized): CAPM regression intercept estimate divided by regression residual volatility
- > Worst Drawdown: Worst peak to trough performance (measured based on monthly returns)
- > Rolling X-Year Win %: Percentage of rolling X periods that a strategy outperforms
- > Sum (5-Year Rolling MaxDD): Sum of all 5-Year rolling drawdowns
- Down %: The Down Number Ratio is a measure of the number of periods that the investment was down when the benchmark was down, divided by the number of periods that the benchmark was down. The smaller the ratio, the better
- Up %: The Up Number Ratio is a measure of the number of periods that the investment was up when the benchmark was up, divided by the number of periods that the benchmark was up. The larger the ratio, the better
- Tracking Error: Tracking Error is measured by taking the square root of the average of the squared deviations between the investment's returns and the benchmark's returns
- > Negative Correlation: Correlation of returns relative to benchmark returns when the benchmark is negative
- > Positive Correlation: Correlation of returns relative to benchmark returns when the benchmark is positive



Strategy Background for FF_VAL slides

- > Simulated Historical Performance: 1/1/1963 to 12/31/2016
- > All returns are total returns and include the reinvestment of distributions (e.g., dividends)
- Gross of all fees and transaction costs
- > From Ken French Website: http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html
- Legend

FF_VAL = Top Decile B/M **SP500** = S&P 500 Total Return Index

- > Hypothetical performance results have many inherent limitations, some of which, but not all, are described in the disclosures at the end of this document. No representation is being made that any fund or account will or is likely to achieve profits or losses similar to those shown herein. In fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently realized by any particular trading program.
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- > Please see the disclosures at the end of this document for additional information.



Strategy Background for Value vs. Market Slide (Warren Buffett Slide)

> Simulated Historical Performance: 1/1/1994 to 12/31/1999

- > All returns are total returns and include the reinvestment of distributions (e.g., dividends)
- Gross of all fees and transaction costs
- > From Ken French Website: http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html
- > Legend

Value Stocks = Top Decile B/M SP500 = S&P 500 Total Return Index RF = Treasury Bill Total Return Index

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