

HOLT Wealth Creation Principles

Quantifying Growth Expectations and Improving Stock Selection

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Bryant Matthews

Director, HOLT
bryant.matthews@credit-suisse.com

David A. Holland

Senior Advisor, HOLT
david.a.holland@credit-suisse.com

David Rones

VP, Investment Strategy
david.rones@credit-suisse.com

Key Points:

- Growth is a key component of valuation. HOLT has a unique approach to quantifying the value of a firm's growth opportunities, which is highly beneficial in gauging growth expectations.
- Forecasting growth and its value is fraught with difficulty and error. Unfortunately, experts provide little guidance. Growth is far more volatile and difficult to predict than a company's return on capital.
- Do growth stocks deliver market-beating returns? HOLT finds that anticipated growth often fails to translate into shareholder wealth.
- HOLT's adaptation of the well-known Boston Consulting Group (BCG) matrix provides a simple and powerful method for assessing and categorising company profitability and anticipated growth.
- In the context of this matrix, Cash Cows have the best overall performance relative to the market. Ironically, Stars tend to disappoint and underperform the market.
- Investors should critically assess holdings where the Present Value of Growth Opportunities (PVG0%) exceeds 40% and sell if in doubt.

Introduction

Growth, return on capital and risk are essential ingredients in assessing a firm's value. But what is meant by growth? Investors generally speak about earnings growth, but this definition is incomplete since it does not account for the quality of the earnings growth. A mature firm whose return on equity (ROE) is less than its cost of equity (COE) will destroy value by re-investing retained earnings in company growth.¹ In this report, growth is defined as asset growth. A firm that can invest in projects that beat their cost of capital will create value and increase the firm's intrinsic valuation. **The quality of asset growth depends upon whether return on capital exceeds the cost of capital.**

How much of a firm's value is attributable to growth? This important and seemingly innocuous question defies a simple, consistent answer, and makes it challenging to untangle the value of a firm's growth opportunities from its existing business. **An understanding of the value attributable to the existing business and to future growth can aid investors in company analysis and stock selection.**

The allure of growth is often irresistible, with investors conflating earnings growth and share price appreciation. This confusion frequently leads to paying steep premiums for growth stocks. **Betting on growth can be costly: growth is elusive, and stocks with high growth expectations often fail to deliver.** They might succeed in creating economic value but fail in generating shareholder wealth.² **Don't confuse good firms or good stories with good investments.**

¹ A simple example is to value a company whose ROE and equity growth, g , remain constant into perpetuity: $P/E = (1 - g/ROE) / (COE - g)$. The price-to-earnings ratio P/E expands with increasing growth if $ROE > COE$ but contracts if $ROE < COE$. In the former case, re-investment creates shareholder value while in the latter it destroys shareholder value. Note that when $ROE = COE$, growth is value neutral and the P/E remains constant.

² It is vital to understand the difference between creating value and wealth. A firm creates economic value by investing in projects that beat its cost of capital. If the growth in investment or the return on investment does not meet the market's expectations, the firm will underperform the market and fail to generate shareholder wealth. Good companies don't always make good investments, particularly when expectations are high.

Instead of chasing exciting growth stories, investors would benefit from a dispassionate approach that evaluates growth expectations and compares them to growth opportunities and historical benchmarks, and subjects forecast scenarios to sensitivity tests. HOLT offers a useful technique and beneficial rule-of-thumb that can help investors avoid expensive, front-page stocks with attention-grabbing growth expectations.

Do growth strategies ultimately deliver market-beating performance? Using an adaptation of the Boston Consulting Group (BCG) product portfolio matrix, **HOLT shows that cumulative shareholder returns to stocks with high growth expectations frequently lag shareholder returns to firms with much lower anticipated growth.** Fortunately, growth strategies can be coupled with HOLT's pricing heuristics to generate improved performance.

Choosing Growth, but at What Price?

Growth acts as a value multiplier, and can transform an ordinary stock into a value-creating machine. When return on investment (ROI) is greater than the cost of capital, growth amplifies the creation of economic value; when ROI is below the cost of capital, growth shrinks it. Motivated, perhaps, by growth's transformative power, Wall Street exhibits a singular focus on earnings growth. Regrettably, Wall Street experts, by and large, offer little guidance in anticipating tomorrow's *actual* powerhouse growers, or predicting growth for the firms they follow. **Academic research finds analysts' long-term earnings growth forecasts optimistically biased, grossly inaccurate, and generally meaningless.**³

Why is predicting growth so difficult? Research shows that corporate growth possesses a strong random component, making it very difficult to anticipate.⁴ Importantly, investors lack key knowledge of firms' internal constraints to make better predictions. Edith Penrose articulated a view in her seminal book *The Theory of the Growth of the Firm*, that opportunities for, and limits to, future growth are shaped by the resource/capability accumulation of a firm's past growth. Firms that recently experienced rapid growth face managerial and entrepreneurial resource constraints, or *adjustment costs*. Adjustment costs represent the time and effort to integrate new managers and operational support into existing operations to facilitate further expansion.⁵ Thus, even firms with tremendous growth opportunity are often resource constrained and unable to meet their potential. This knowledge of internal firm constraints is difficult for investors to obtain, and may explain some of the tendency for optimistic growth forecasts or forecasts of sustained growth that are rarely met. **It is far easier for analysts to extrapolate growth in a spreadsheet than for managers to deliver it** (e.g., 15% annual growth over 5 years equates to a doubling of business).

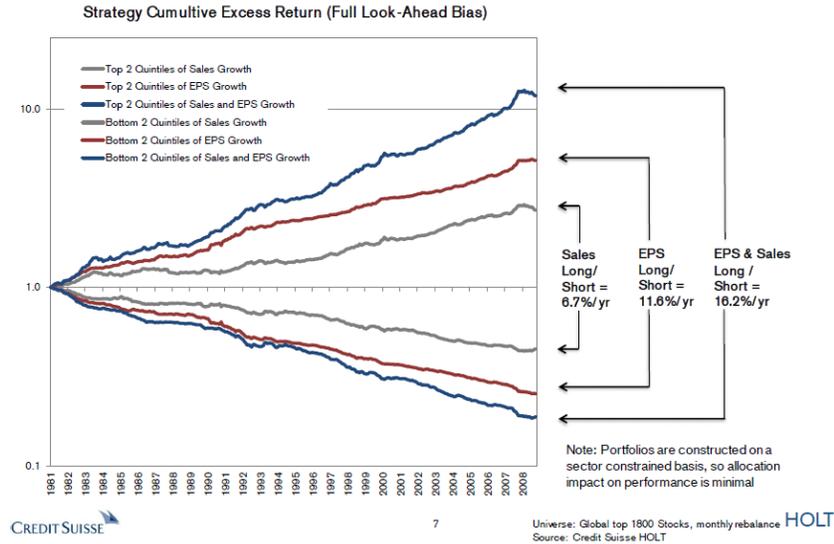
Clearly, growth matters, particularly when coupled with quality. In the following chart, HOLT knowingly employed look-ahead bias to distinguish shareholder returns to stocks of varying sales and earnings growth rates. The results indicate monotonically increasing returns to the largest growers. **This supports the view that correctly anticipating high growth can pay off handsomely; but given growth's unpredictable, random nature, this objective is nearly impossible to achieve in practice.**

³ See, for instance: Barniv, R., O. Hope, M. Myring and W. Thomas. 2009. "Do analysts practice what they preach and should investors listen? Effects of recent regulations." *The Accounting Review*, 84(4), 1015-1039; Chan, L., J. Karceski, and J. Lakonishok, 2003. "The Level and Persistence of Growth Rates." *Journal of Finance*, 58 (2): 643-684 ; La Porta, R., 1996. "Expectations and the cross-section of stock returns." *Journal of Finance*, 51, 1715-1742.

⁴ See Geroski, Paul A., Stephen J. Machin, and Christopher F. Walters, "Corporate Growth and Profitability," *The Journal of Industrial Economics*, Volume XLV, Issue 2 (June 1997).

⁵ Penrose was the first to articulate a comprehensive view that firms face a constraint on organic growth based on the resource/capability accumulation of past growth. See Penrose, E.T. *The Theory of Growth of the Firm*. Blackwell: Oxford, 1959.

We know there is a significant reward for identifying stocks with superior growth characteristics



Can experts help investors with forecasts and predictions? Unfortunately, expert predictions across many subjects are often little better than chance and tend to be narrow, which makes future-oriented tasks such as predicting growth and future market successes exceedingly difficult.⁶ Tetlock finds that experts who reported 80% or higher confidence in their predictions over a wide range of political events were actually correct only 45% of the time. He writes, “expertise thus may not translate into predictive accuracy but it does translate into the ability to generate explanations for predictions that experts themselves find so compelling that the result is massive over-confidence.”⁷

Montier argues that a better use of analysts’ time would be to analyze the present and its connection to future expectations embedded in today’s price, instead of forecasting an unknowable future.⁸ In essence, he is arguing that a market-implied valuation approach such as HOLT is more sensible than forecasts with all of their behavioral biases such as over-confidence and over-optimism.

Another intriguing explanation for large errors in growth predictions is found in Prospect Theory.⁹ According to PT, investors weight tail events more than empirical observation prescribes to allow for a lottery-like preference for wealth distribution. This is a profound explanation because it suggests that investor decision weights are not the product of *bias*, but rather *preference*. Horse-race betting is an effective real-world example in which there exists a pronounced preference toward betting on “long-shots” with a relatively small chance of winning and high potential payout and under-betting on “favorites”, or horses with a more likely chance of winning. Do growth stocks really deliver lottery-like shareholder returns?

Improving Investment Performance by Avoiding Growth Outliers

Given the difficulty in identifying tomorrow’s high growth firms, what can growth investors do? One helpful rule is to avoid stocks with high growth premiums. Here is how HOLT can help.

⁶ An intriguing discussion on expert political prediction is provided by Philip Tetlock in *Expert Political Judgment: How Good Is It? How Can We Know?* Tetlock observes that political expert predictions fall on lower aggregate skill curves than a chimpanzee’s equal-guessing strategy (experts barely do better than chimpanzees throwing darts).

⁷ Tetlock, P.E. (2002) Theory-driven reasoning about plausible pasts and probably futures in world politics. In Gilovich, T., Griffin, D. and Kahneman, D. (eds) *Heuristics and Biases: The Psychology of Intuitive Judgment*. Cambridge University Press.

⁸ See for example “The Folly of Forecasting: Ignore all Economists, Strategists and Analysts” (105-121) in Montier’s book *Behavioural Investing: A practitioner’s guide to applying behavioural finance* (2007), John Wiley & Sons.

⁹ Kahneman, D. and A. Tversky (1979): “Prospect Theory: An Analysis of Decision Under Risk,” *Econometrica*, 47(2), pp. 263-291.

For each firm in its database, HOLT provides an estimate of the value of the firm assuming zero real growth, called the Present Value of the Existing Business (PVEB). Using the full spectrum of forecast future cash flows, a “no-growth” scenario is generated based on a schedule of asset replacement necessary to replenish, but not grow the business so that the company can maintain operations. Free cash flows from this scenario are discounted back to the present, resulting in an economically sound estimate of the value of a firm’s existing business (for more information, click here: [HOLT NOTES Valuation](#)).¹⁰

As an example, consider two firms. Gregg’s is a bakery retailer located in the United Kingdom. CFROI are presently close to 6%, which is the long-term average discount rate. As a consequence, growth cannot be expected to contribute much value to this firm since very little or no economic profit is generated when the return on capital is close to the cost of capital. In this example, the present value of the existing business would equal the market enterprise value. Further investment in making dough doesn’t lead to making more dough for shareholders.

In contrast, Google is an earlier lifecycle firm. Growth acts as a value multiplier, amplifying total firm value when incremental real returns on capital of 15% are assumed since these are well in excess of Google’s cost of capital. HOLT estimates that 57% of Google’s total value is derived from the existing business, and 43% of total firm value is expected from growth opportunities.

How can investors quantify the market’s expected value of growth opportunities? Simply by subtracting PVEB from market enterprise value! The result is the market’s estimated value of the firm’s Present Value of Growth Opportunities (PVGO). Continuing with the two previous examples, subtracting PVEB from market enterprise value results in an estimated 9% of value attributable to growth for Gregg’s and 39% for Google, as follows:¹¹

$$PVGO = (MEV - PVEB) / MEV$$

$$PVGO_{GRG} = (£819M - £744M) / £819M = 9\%$$

$$PVGO_{GOOG} = (\$419Bn - \$257Bn) / \$419Bn = 39\%$$

HOLT improves over traditional measures of PVGO by fading CFROI in distant years toward the long-term mean-reverting level.^{12 13} This avoids the economically questionable practice of embedding a perpetual value creating spread. To learn more about the HOLT fade methodology, click [HOLT NOTES Fade](#). Also, the HOLT approach is market-neutral since each firm’s cost of capital is based on the HOLT market-implied approach.¹⁴ This has enormous benefits since it mitigates changes in the portion of firm value attributed to the existing business and to growth opportunities that occur due to market movements.¹⁵ Lastly, HOLT forecasts in real currency, thus the existing business is based on zero real growth as opposed to the usual 0% nominal growth that is assumed in other approaches, which is a common mistake, since the existing business should grow at inflation to be consistent with the nominal discount rate.

¹⁰ For firms where PVEB is flawed or unintuitive, HOLT’s Inflation Adjusted Net Assets can be used as a reliable alternative.

¹¹ These values were derived using HOLT and data as of Feb 18, 2014.

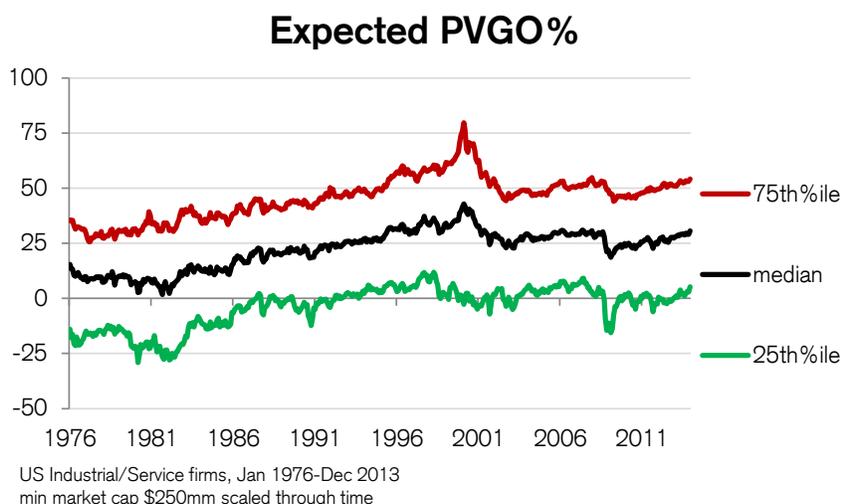
¹² Both the traditional free cash flow and economic profit approaches imply replacement of assets in the no-growth case. Convention assumes depreciation as a suitable replacement cost proxy. More importantly, they often embed a perpetual spread for the existing business that perpetually creates or destroys value. Another issue is that the effect of inflation is rarely accounted for.

¹³ Mathematically, the zero-growth scenario can be expressed as: $PVEB = \sum_{i=1}^N \frac{NCR EB_i}{(1+DR_i)^i}$. Market Enterprise Value equals: $MEV = PVEB + PVGO$. And, by extension, a firm’s expected Present Value of Growth Opportunities equals $MEV - PVEB$. Valuations are performed at a market-neutral cost of capital to minimize risk appetite distortions. Investments and other non-operating assets are included in PVEB.

¹⁴ HOLT’s discount rate is reflective of current period risk appetite and is therefore indifferent to the overall valuation level of the market. This means that 50% of equities will generally show upside, 50% downside.

¹⁵ For example, if market risk appetite increased dramatically and a company’s share price increased in line with the market, then its PVGO would also increase if an historically-based cost of capital were used in the valuation. Use of a market-implied cost of capital would compensate for this effect since the firm’s cost of capital would drop.

What is useful about PVGO? In the chart below, PVGO as a percent of market enterprise value is shown from 1976 through 2013 for US equities.¹⁶ In contrast to a price-to-book multiple, which offers insight into the relative price of a firm but says nothing about the influence of growth on firm value, PVGO% offers an explicit view of the expected value contribution from growth. Key boundaries displayed on the chart help investors in selecting or discarding growth stocks.



How does expected PVGO inform us about recent history? The late 70's and early 80's were characterized by high but declining inflation (post-1979) and US firms struggled to earn operating returns near the cost of capital. HOLT Price/Book multiples hovered modestly below 1.0 during this challenging period, and expected PVGO% remained below 10%. After the 1981 recession, a long bull market began, culminating in the collapse of the tech bubble in 2000. During this time, CFROI steadily improved for most US firms. Accordingly, the market assigned increasing value to growth opportunities, which appeared progressively more profitable, especially with decreasing interest rates and inflation. Median PVGO% climbed as high as 40% before tapering off and trending back toward 25%. Since the recent low of the Great Recession, median PVGO% has climbed back above 25%.

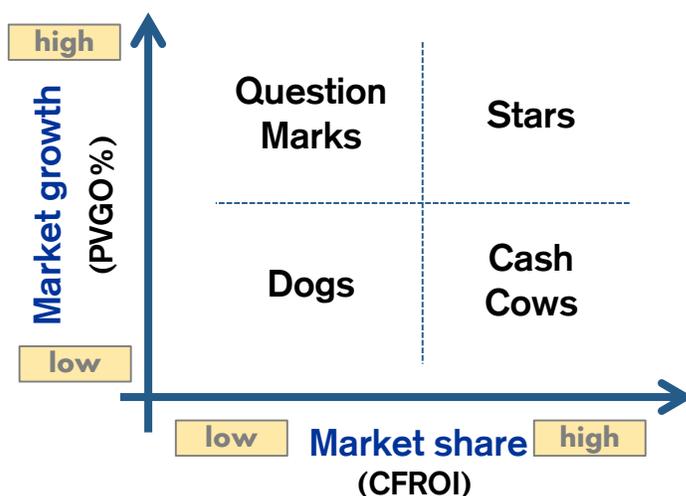
How can these benchmarks help investors? Disciplined investors seek to pay a price less than a stock's intrinsic worth, be it for a growth or value stock. Deciphering a stock's real value is no easy task, but, using a simple rule of thumb, investors can improve their chances of avoiding stocks with excessive growth premiums and targeting prospects where growth may be undervalued. **Except in rare cases, stocks with PVGO% greater than 40% should be avoided.**¹⁷

To investigate the market performance of firms with different growth expectations, the Boston Consulting Group (BCG) matrix was used to separate stocks into the well-known categories of Stars, Cash Cows, Question Marks, and Dogs. This framework allows for important observations on growth, quality and value strategies.

¹⁶ Stated as a percentage of market enterprise value.

¹⁷ See Exhibit 1 in Appendix. When stocks with PVGO%>40 were eliminated, all portfolios generated equal or improved risk/reward ratios. The suggested rule of discarding stock ideas with PVGO%>40 is not meant to be binding, but rather to act as a sanity-check.

BCG Matrix



Do Growth Strategies Outperform the Market?

Academic literature shows that growth strategies almost invariably underperform value strategies over time.¹⁸ HOLT's backtests of traditionally-defined growth and value portfolios support this view. Risk-adjusted returns are lower for growth portfolios than value (Appendix, Exhibit 1). With such unfavorable evidence, how can the growth investor thrive without being clairvoyant?

Developing a Framework for Assessing Profitability and Growth

Given the difficulty in pre-selecting high growth achievers, HOLT tested several questions. First, how do growth stocks perform relative to value stocks over time? Using the BCG matrix to categorize stocks as Question Marks, Stars, Cash Cows, and Dogs offers a convenient approach that intuitively distinguishes between growth and quality, two critical factors in the valuation thought-process¹⁹.

The classic BCG matrix has two dimensions, with relative cash usage (high market growth) along the y-axis and relative cash generation (high market share) along the x-axis.²⁰ The general idea is for a company to have a balanced portfolio of products to fund tomorrow's products with today's cash flow. Products begin as Question Marks in the upper left quadrant (low cash generation and high growth potential thus requiring funding); successful Question Marks become Stars in the upper right quadrant (high cash generation consumed in funding growth); and once growth cools, Stars mature into Cash Cows in the bottom right quadrant (high cash generation, low growth). Unsuccessful products are Dogs, residing in the lower right quadrant (low cash generation and low growth). Instead of products, HOLT extends the concept to a set of companies available to investors.

The dimensions were altered to CFROI on the horizontal axis to indicate profitability and business quality; and PVGO% on the vertical axis to represent expected growth. Thus, a Cash Cow is a firm with a CFROI greater than its sector peers but expected growth below its sector peers. Firms that generate high CFROI with low growth are highly cash generative. A Dog is a low CFROI business with limited growth expectations. Poor quality firms shouldn't grow

¹⁸ See, for instance: Fama, Eugene F. and Kenneth R. French. "Value Versus Growth: The International Evidence." Retrieved from SSRN website: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2358?xyzallow

See also: Arnott, Robert D., Feifi Li, Katrina F. Sherrerd. "Clairvoyant Value II: The Growth/Value Cycle." *The Journal of Portfolio Management* Volume 35, No. 4 Summer 2009.

¹⁹ The treatment is in line with the HOLT concept of industrial life cycle and fade. In essence, the industrial life cycle is transposed to a two dimensional matrix. Time rotates in a clockwise fashion. See [HOLT NOTES Fade](http://www.bcg.com/about_bcg/history/history_1968.aspx)

²⁰ http://www.bcg.com/about_bcg/history/history_1968.aspx

unless CFROI exceeds the cost of capital. If wisely managed, these firms can create shareholder wealth while destroying less and less economic value. Stars tend to be highly attractive to growth investors. These are firms that generate impressive CFROI and are expected to re-invest the cash generated into more growth. Question Marks exhibit low profitability but very high growth expectations. These tend to be early life cycle firms that trade at very high multiples, for example, Twitter and FaceBook.

The backtest results show that exciting, higher growth stocks (Question Marks and Stars) underperform stocks with lower growth expectations (Cash Cows and Dogs).²¹ Risk-adjusted returns are also lower (see next page and Appendix). It is striking that Question Marks perform the worst by a significant margin. Investors chase risky growth at great peril and would benefit from a calmer, cognitive approach.²² Cash Cows did best in the backtest. Value investors, particularly those with an eye for quality tend to perform best over time. This agrees with HOLT’s previous findings on high quality firms.²³ As a general rule of thumb, the findings suggest that Dogs are unlikely to turn around but that attractively priced Dogs can make for good shorter-term trades, especially when coupled with positive momentum.



An important follow-up question is this: can growth stocks be acquired at a lower price to deliver outperformance? To accomplish this, a third dimension was added to the BCG Matrix that split stocks into low and high relative Economic PE.²⁴ This additional factor separates the original BCG categories into “cheap” and “expensive” alternatives. The backtest results underscore the power of quality and price.

Instead of seeing growth emerge as a winner, the top two performing portfolios over time were cheap Cows and Dogs. Fascinatingly, even when distinguished by price, Growth stocks continue to lag Value, although cheaper Stars generated near-benchmark performance.

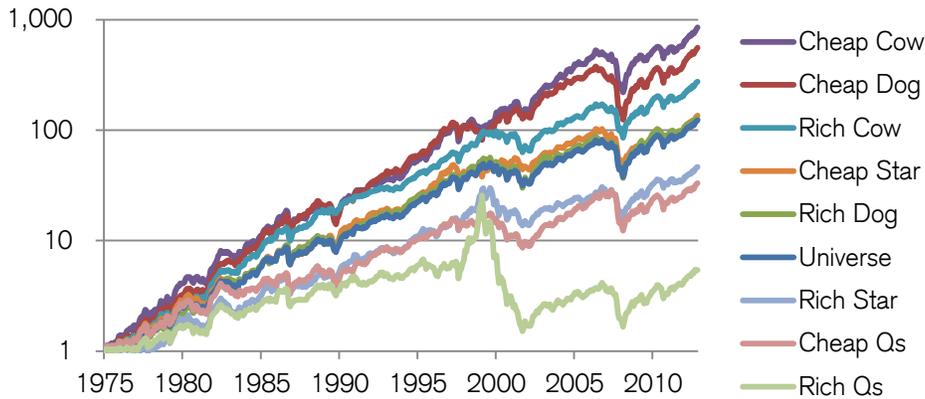
²¹ Sample composition: largest 1000 firms by market cap per period; US Industrial/Service firms, financials and utilities excluded; timeframe backtested January 1976-October 2013. Stocks were placed into 5 equal-sized groups ranging from lowest to highest CFROI and 5 equal-sized groups ranging from lowest to highest PVGO%. Thus, the bottom left category represents to stocks with the lowest 1/5 CFROI and PVGO%. Middle quintiles are treated as indeterminate groups since they are bordered on each side .

²² See HOLT’s recent analyses of Twitter for an expected value approach to investing: Part 1 - [Twitter - Tulip or Treasure](#); Part 2 - [Twitter - Tulip or Treasure](#)

²³ See the following HOLT report for a discussion of high quality firms and related portfolio benefits: [Was Warren Buffett Right: Do Wonderful Companies Remain Wonderful?](#)

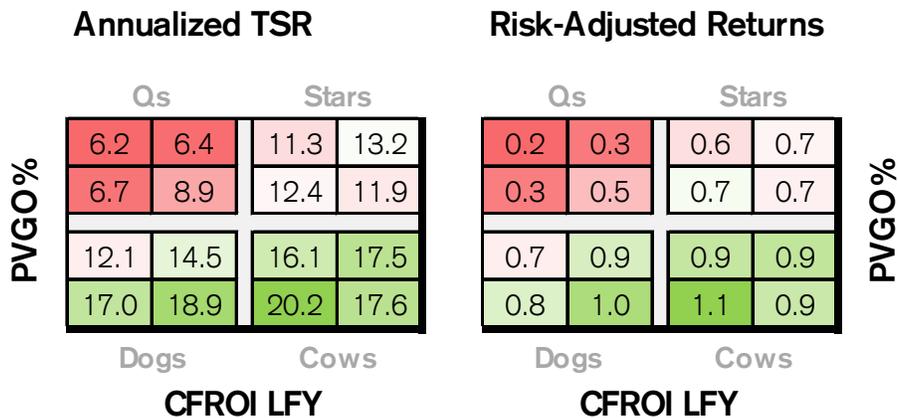
²⁴ Economic PE is defined as HOLT Price to Book Ratio / CFROI (Used in Valuation), which is approximately equal to market enterprise value / gross cash flow minus economic depreciation. An analogous traditional metric would be P/E, which can be expressed as the traditional price-to-book ratio divided by ROE. EV/EBITDA is another analog, but one HOLT doesn’t recommend as there is no proxy for fixed asset replacement.

Cumulative Shareholder Returns



US Industrial/Service firms, Jan 1976-Oct 2013
Largest 1000 firms per period

The last test was to question whether growth stocks performed better when high growth premiums were avoided. To accomplish this, stocks with PVGO% greater than 40% were eliminated from all portfolios. The results were favorable, and reveal that ALL portfolios benefited from excluding stocks with excessive growth premiums, returning equal or higher risk-adjusted performance. Cheap Stars for instance, added 60ps per annum to average annual performance, and finished as market performers.



CONCLUSIONS

- Historically, stocks with high growth expectations generally underperform stocks with low growth expectations.
- The best performing BCG classifications in this study were Cash Cows followed by Dogs. Wonderful companies, especially when purchased at an attractive to fair price, tend to be wonderful investments.
- Stars and particularly Question Marks are generally too expensive as evidenced by underperformance relative to the market. Investors' growth expectations are not met by companies' performance.
- Growth strategies do best selecting attractively priced Stars and Cash Cows with higher relative growth potential.
- Growth strategies are most fruitful when combined with other factors, especially price and momentum (see the Wonderful Companies report for more detail on momentum's benefits).
- Stocks with PVGO% in excess of 40% should generally be avoided.

APPENDIX

Exhibit 1

Traditional BCG Portfolios

US Industrial/Service firms, January 1976 - October 2013

	Universe	Stars	Cows	Dogs	Qs
Initial Investment	\$1	\$1	\$1	\$1	\$1
Final Value	\$123	\$80	\$434	\$247	\$22
Annualized Return %	13.6	12.3	17.4	15.7	8.6
Standard Deviation	17.3	17.4	16.9	17.5	19.3
Return per unit risk	0.78	0.71	1.03	0.89	0.44

HOLT's Enhanced BCG Portfolios

US Industrial/Service firms, January 1976 - October 2013

	Universe	Cheap Star	Rich Star	Cheap Cow	Rich Cow	Cheap Dog	Rich Dog	Cheap Qs	Rich Qs
Initial Investment	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Final Value	\$123	\$135	\$46	\$849	\$275	\$556	\$127	\$33	\$5
Annualized Return %	13.6	13.8	10.7	19.5	16.0	18.2	13.7	9.7	4.6
Standard Deviation	17.3	17.8	19.2	19.9	15.8	19.3	18.1	18.9	25.5
Return per unit risk	0.78	0.78	0.56	0.98	1.01	0.94	0.76	0.51	0.18
Return per unit risk after eliminating PVGO % > 40	0.78	0.79	0.74	0.98	1.01	0.94	0.79	0.61	0.40

Exhibit 2

Persistence of Real Asset Growth versus CFROI

(stocks split into 5 portfolios ranging from lowest to highest growth or CFROI. Median value tracked over time)

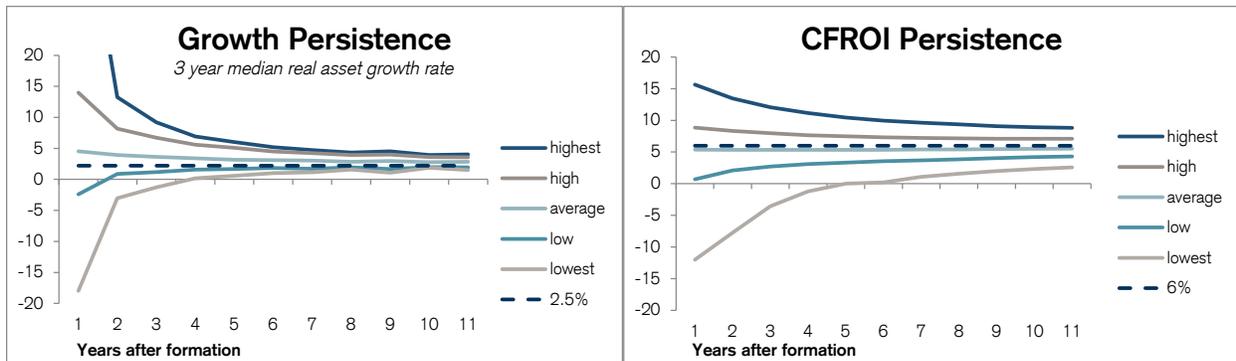


Exhibit 3

Tail Events for Value and Growth Stocks

Style	Obs start	Obs end	Survive	60 Month Cumulative TSR					
				median	99%ile	99.5%	99.9%	skewness kurtosis	
VALUE	378,333	132,444	35%	1.6	13.9	20.0	41.5	8.6	142.1
GROWTH	389,918	206,011	53%	1.4	9.7	13.1	24.5	9.3	222.3

Stocks categorized as Value, Core, or Growth based on HOLT P/B ratio. Lowest 1/3rd are Value, highest 1/3rd are Growth. 35% of Value stocks survive on average over any 5 year period; 53% of Growth stocks survive over the same interval. The median shareholder return over 5 years is a cumulative gain of 60% for Value and 40% for Growth. Right-tail thresholds are shown to emphasize that Value stocks tend to have larger outsized gains than Growth stocks, a potentially surprising result for some.

Global Market Commentary Disclaimer²⁵

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The HOLT methodology does not assign ratings or a target price to a security. It is an analytical tool that involves use of a set of proprietary quantitative algorithms and warranted value calculations, collectively called the HOLT valuation model, that are consistently applied to all the companies included in its database. Third-party data (including consensus earnings estimates) are systematically translated into a number of default variables and incorporated into the algorithms available in the HOLT valuation model. The source financial statement, pricing, and earnings data provided by outside data vendors are subject to quality control and may also be adjusted to more closely measure the underlying economics of firm performance. These adjustments provide consistency when analyzing a single company across time, or analyzing multiple companies across industries or national borders. The default scenario that is produced by the HOLT valuation model establishes a warranted price for a security, and as the third-party data are updated, the warranted price may also change. The default variables may also be adjusted to produce alternative warranted prices, any of which could occur. The warranted price is an algorithmic output applied systematically across all companies based on historical levels and volatility of returns. Additional information about the HOLT methodology is available on request

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