

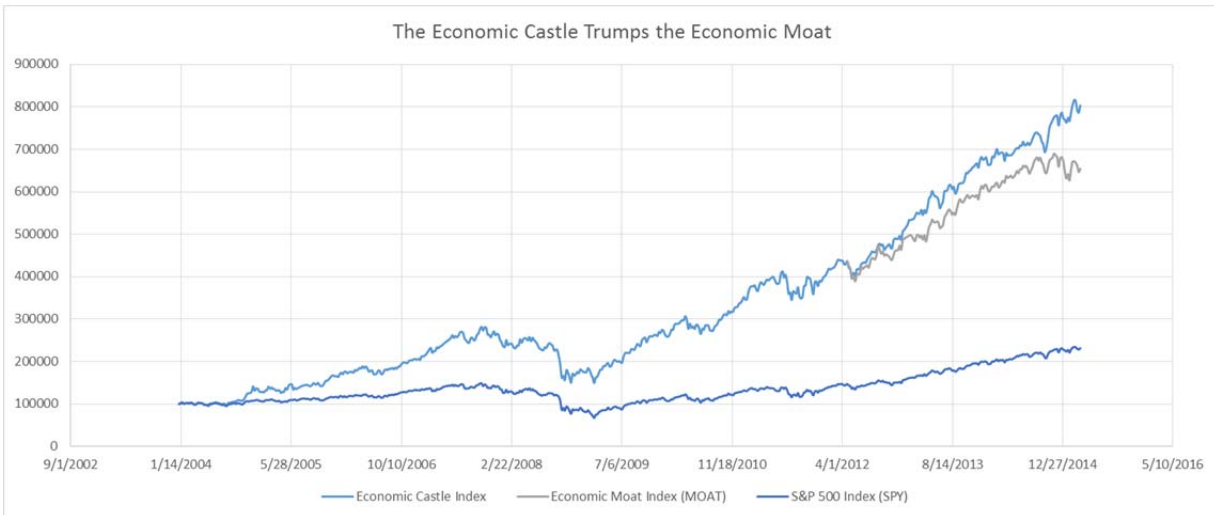


The Castle Trumps the Moat

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Abstract

Berkshire Hathaway's Warren Buffett has popularized the concept of an "economic moat," perhaps best described in common language as sustainable competitive advantages. Whereas economic moat analysis focuses on the duration of a firm's economic profit stream, as measured by return on invested capital less the costs of which to attain that capital, economic castle analysis focuses on the magnitude of economic profit creation over the realizable near term. Unlike the substantial duration risk inherent to predicting economic profits 20, 30 or more years into the future, the economic castle framework posits that the strongest performing companies during certain phases of the economic cycle will be those that generate the most economic value over the foreseeable future. The results in this paper showcase the aggregate outperformance of a select number of outsize economic-profit creators within the Valuentum Economic Castle Index relative to both S&P 500 firms and companies with "wide" economic moats.

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I. Introduction

A. Overview

The Valuentum Economic Castle rating [see Appendix] is a measure of a company's “economic profit” generating capacity, or the difference between a company's forward return on invested capital (ROIC) and the costs to attain such capital, the latter measured by the company's weighted average cost of capital (WACC). The Economic Castle rating assumes that ‘economic profit’ is the primary factor in assessing the business value that a company generates for shareholders. For example, a company that generates an annual ROIC of 12% and has a WACC of 10% is generating 2 percentage points of annual economic value for shareholders. Firms with the best Economic Castle ratings are poised to generate the most economic value for shareholders *over the realizable future*, regardless of their competitive positions or any other business quality.

The Economic Castle rating evaluates a company on the basis of the *magnitude* of the economic profit that it will deliver to shareholders (as measured by its ROIC-less-WACC spread), while widely-accepted economic moat analysis focuses on the *duration* of a company's economic profit stream. The higher the positive difference between a company's ROIC and its WACC over the next five years, the more attractive its Economic Castle rating. Business (economic) returns and stock market returns are inextricably linked, and we seek to provide informed research that showcases the benefits of economic castle analysis, which minimizes the duration risk associated with long-term economic moat assessments.

Unlike other indices that tell us little about the *absolute* magnitude of a company's business-value creation capacity, the Valuentum Economic Castle Index takes into account the core aspect of investing, or expected cumulative economic value creation *over the foreseeable future*. Though undefined in the academic community, the realizable future, in our view, is a period that captures the immediate forward 5 years, a length sufficiently long enough to consider longer-term dynamics but one that de-emphasizes the “guess work” dominating qualitative analysis predicting economic performance in periods 20, 30, or more years into the future. The Economic Castle rating is assigned by the Valuentum Team and is primary based on two criteria that consider both quantitative and qualitative considerations:

1. The framework behind Valuentum's ValueCreation rating

The ValueCreation rating measures the firm's *historical* track record in generating economic value for shareholders, taking the average difference between ROIC (without goodwill) and the firm's estimated WACC during the past three years. The

firm's performance is measured along the scale of EXCELLENT, GOOD, POOR, and VERY POOR. Those firms with EXCELLENT ratings have a demonstrated track record of creating economic value, while those that register a VERY POOR mark have been destroying economic value.

2. A forward-looking assessment of a firm's expected economic returns over the immediate forward five-year period

Our view is that the most economic value for the largest value-contributors will be generated over the immediate forward five-year period. These returns are not weighed down by the compounding dynamics of a discount rate and are not nearly as exposed to the inescapable forecasting error that occurs in later stages within any modeling framework. A firm that is generating an economic profit spread of 100 or so percentage points may generate more value for shareholders over a shorter time period than one that generates 1 or 2 percentage points each year for decades into the future.

B. Methodology

Firms with Economic Castle ratings can be underpriced, fairly-priced, or overpriced. Though the economic value framework and the discounted cash-flow valuation framework are interdependent and correlated, the Economic Castle rating is independent of a firm's price-to-fair value assessment, or the ratio of a company's stock price relative to its intrinsic worth. The Economic Castle rating is a measure of business return, not valuation.

The Valuentum Team assigns Economic Castle ratings to stocks on the following scale: Highest-Rated, Very Attractive, Attractive, Neutral and Unattractive. The data used to calculate a firm's ROIC and WACC, the relationship of which derives the Economic Castle rating, are collected from regulatory filings and internal analyst estimates, which ultimately drive a company's pro forma financial statements via Valuentum's discounted free cash flow valuation model.

The table outlines the general guidelines the Valuentum Team follows in assigning Economic Castle ratings to companies under coverage.

Table 1: Guidelines for Assigning the Economic Castle Rating

Economic Castle Rating	Forward ROIC-less-WACC Spread
Highest-Rated	150 percentage points and over
Very Attractive	Greater than 50 percentage points but less than 150 percentage points
Attractive	Greater than 0 percentage points but less than 50 percentage points
Neutral	A little over or a little below economic parity. (assigned by Valuentum Team)
Unattractive	Below 0 percentage points.

Stocks garnering the Highest-Rated Economic Castle rating have an average forward ROIC-less-WACC spread that is typically greater than 150 percentage points during the immediate 5-year future measurement period. The Highest-Rated Economic Castles vary across several sectors of the economy. Examples of a few Highest-Rated Economic Castles are Apple (Computer Hardware), Adobe (Software), AmerisourceBergen (Wholesale Drug Providers), Capella Education (Education Services) and Morningstar (Securities Research).

For firms earning a Very Attractive Economic Castle rating, their average forward ROIC-less-WACC spread is estimated to be greater than 50 percentage points but less than 150 percentage points during the measurement period. For entities assigned an Attractive Economic Castle rating, the estimated average forward ROIC-less-WACC spread is generally greater than 0 percentage points but less than 50 percentage points over the measurement period.

Typically, firms assigned a Neutral Economic Castle rating have an ROIC-less-WACC spread of either a little above or a little below parity during the measurement period. Because the breakpoint between an Attractive and Unattractive Economic Castle rating is set at 0 (parity), the Valuentum Team spends significantly more time evaluating stocks that fall near the parity line as it relates to determining their respective Economic Castle ratings.

Finally, companies with Unattractive Economic Castle ratings have an expected average forward ROIC-less-WACC spread below 0 percentage points, suggesting that economic value destruction can be expected for the foreseeable future on the basis of the Valuentum Team's forecasts.

C. Hypothesis

We posit that a group of companies that collectively represent the best Economic Castle ratings across the economy may be worth considering within a portfolio context during certain phases of the economic cycle. Though the merits of focusing on the long term have been well-documented in the teachings of Warren Buffett, intrinsic value estimation will *always* rest on time-weighted future free cash flows, where near-term performance remains critical in assessing long-term intrinsic value for two primary reasons:

- 1) Near-term free cash flows are not significantly weighed down by a compounding discount rate (free cash flow generated in Year 1 is worth significantly more than free cash flow generated in Year 30)
- 2) Near-term performance may provide the best insight in assessing mid-cycle and/or long-term growth and profitability assumptions, the latter of considerable importance in estimating intrinsic worth.

The market's tendency to put significant weight on a company's near-term expected performance is supported by these two dynamics. As such, we believe at certain points of the economic cycle, a group of companies with strong Economic Castle ratings can outperform relative to both S&P 500 (SPY) firms and companies with "wide" economic moats.

II. Index Characteristics

A. Structure of the Valuentum Economic Castle Index

When all criteria for construction are satisfied, there are a maximum of 27 companies that can be included in the Valuentum Economic Castle Index, comprising of three of the top-rated Economic Castles within each economic sector (9 in all), as defined by the Valuentum Team.

Such an approach ensures adequate sector diversification in order to focus on the contributions of the Economic Castle 'factor.' In a similar spirit, the equal-weighting of each firm within the Valuentum Economic Castle Index helps to ensure that performance will not be attributable to just one or two particular holdings and instead

will be primarily a result of the Economic Castle ‘factor.’ Other factors such as size, value, growth, and volatility are not criteria for inclusion to the Index.

The construction of the Valuentum Economic Castle Index seeks to eliminate confounding factors that may “muddy” the return attributed solely to the Economic Castle characteristics of firms held within the Index.

B. Details

1) Inception Date

The inception date of the Valuentum Economic Castle Index is May 5, 2015. The Index value at inception is 100,000.

2) Frequency of Calculations

The Valuentum Economic Castle Index values are calculated weekly¹.

3) Scheduled Reconstitution Date

The Valuentum Economic Castle Index is reconstituted on a quarterly basis on the first trading day of the first month of every quarter. If that day is a holiday, then reconstitution takes place on the day right after. Reconstitution is based on the previous day’s closing index values.

4) Scheduled Rebalancing Date

The Valuentum Economic Castle Index is reconstituted on a quarterly basis on the first trading day of the first month of every quarter. If that day is a holiday, then reconstitution takes place on the day right after. Rebalancing is based on the previous day’s closing index values.

5) Unforeseen Events

In the case when a constituent no longer meets the criteria for inclusion to the Valuentum Economic Castle Index between reconstitution and rebalancing periods, it is deleted from the index and is replaced by the next eligible Economic Castle in the same sector. The new stock will be assigned the same weight as the stock dropped, as of the effective date.

¹ The frequency of calculations is subject to change in the event of commercialization.

III. Assigning Stocks to the Valuentum Economic Castle Index

A. Eligibility

Stocks eligible for inclusion to the Valuentum Economic Castle Index are limited by the number of firms within Valuentum's equity coverage universe, in which Economic Castle ratings can be assigned. All firms that are assigned an Economic Castle rating by the Valuentum Team are eligible for inclusion to the Index.

We do not assign all banking and financial entities an Economic Castle rating on account of the structure of their business models. In the case of most banking and financial firms, for example, the formidable capital base representative of a strong entity would artificially depress return measures even though a strong capital position can generally be viewed as a positive characteristic.

This is different than that of a general industrial operating company, where asset-light operations can be viewed (almost without objection) as a positive characteristic and in part responsible for their elevated returns, the quintessential definition of a strong Economic Castle.

B. Selection

In assigning stocks to the Valuentum Economic Castle Index, the Valuentum Team selects the top three economic-profit generators on the basis of return on invested capital (the Economic Castle rating) from each sector that also meet the following criteria:

- 1) The company must be primarily US-based to rule out the risks associated with non-US based operations, including abnormal country-specific, currency, and geopolitical risks.
- 2) The company must reveal capital discipline beyond economic profit creation and pay a dividend to shareholders, serving to eliminate more speculative entities.

Image 1: Flow Chart

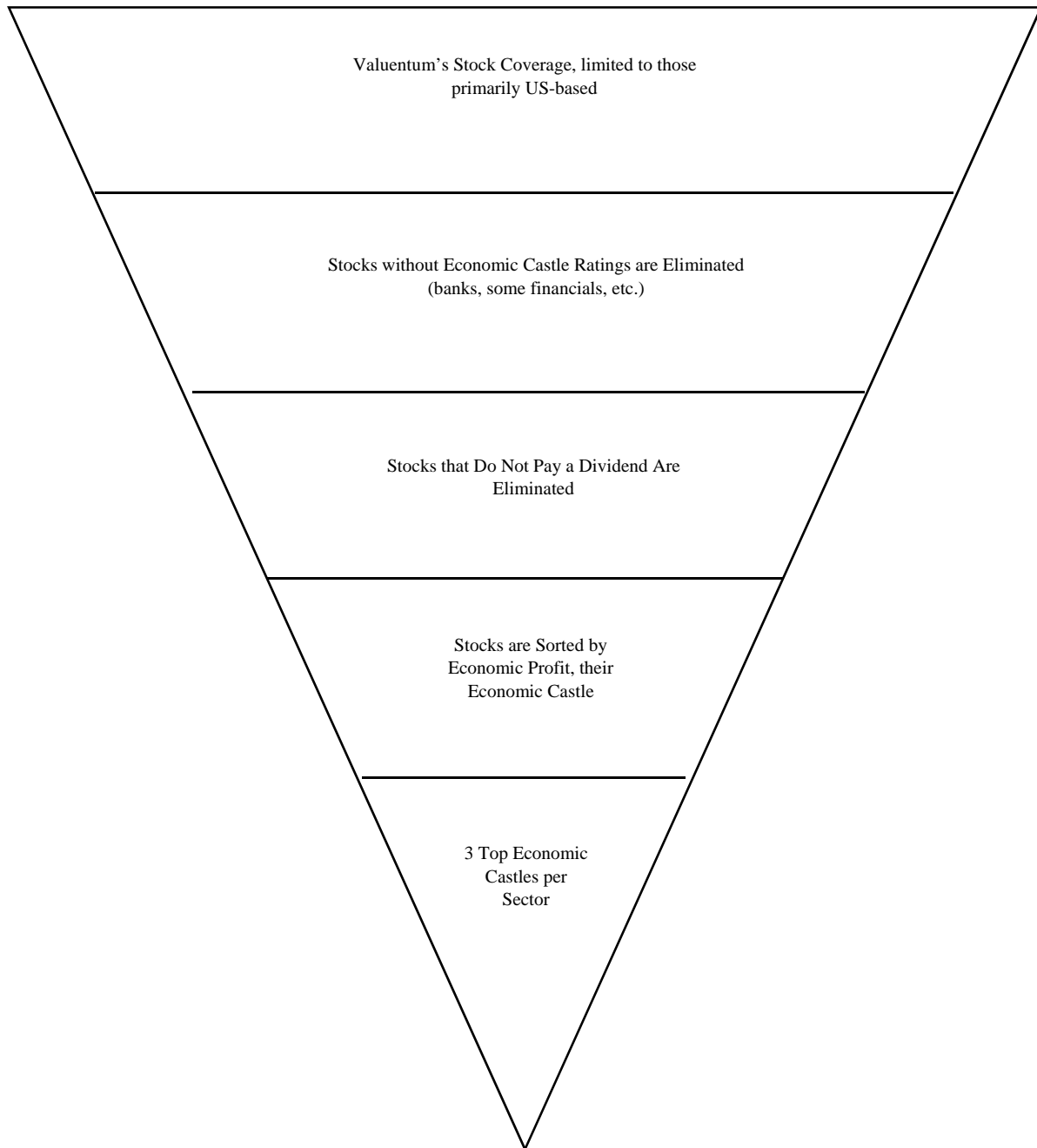


Table 2: Constituents of the Valuentum Economic Castle Index

Valuentum Economic Castle Index			
Name	Ticker	Sector	Industry
Domino's Pizza	DPZ	Consumer Discretionary	Restaurants - Fast Food & Coffee
Capella Education	CPLA	Consumer Discretionary	Education Services
H&R Block	HRB	Consumer Discretionary	Personal Services
Reynolds American	RAI	Consumer Staples	Tobacco
Lancaster Colony	LANC	Consumer Staples	Food Products
Colgate-Palmolive	CL	Consumer Staples	Household Products
Alliance Resource Partners	ARLP	Energy	Industrial Minerals
HollyFrontier	HFC	Energy	Refiners
Franks Intl	FI	Energy	Energy Equipment
Moody's	MCO	Financials	Securities Research
Factset Research	FDS	Financials	Securities Research
CBOE	CBOE	Financials	Exchanges
AmerisourceBergen	ABC	Health Care	Wholesale Drug Providers
Chemed	CHE	Health Care	Home Health Care
Express Scripts	ESRX	Health Care	Wholesale Drug Providers
Raytheon	RTN	Industrials	A&D Prime
Northrop Grumman	NOC	Industrials	A&D Prime
FEI Co	FEIC	Industrials	Electrical Equipment
ARM	ARMH	Information Technology	Communications Equipment
EMC Corp	EMC	Information Technology	Computers & Peripherals
Apple	AAPL	Information Technology	Computer Hardware
Sealed Air	SEE	Materials	Containers & Packaging
Tupperware	TUP	Materials	Containers & Packaging
Southern Copper	SCCO	Materials	Mining - diversified
American Tower	AMT	Telecom Services	Wireless Telecom Services
Cogent Comm	CCOI	Telecom Services	Wireless Telecom Services
AT&T	T	Telecom Services	Telecom Services - diversified

IV. Valuentum Economic Castle Index Calculation

A. The Index

$$Index(t_{k,\cdot}) = \sum_{i=1}^{n_k} p_i(t_{k,\cdot}) \cdot w_i(k),$$

where:

$k = k^{th}$ rebalancing period,

$w_i(k)$ = weight for stock i in the k^{th} rebalancing period,

n_k = number of stocks in the index in the k^{th} rebalancing period,

$t_{k,\cdot}$ = time point the index is calculated in the k^{th} rebalancing period,

$p_i(t_{k,})$ = adjusted price of stock i in the time point the index is calculated in the k^{th} rebalancing period.

B. The Weightings

Weight formula:

$$w_i(k) = \frac{\frac{1}{n_k} \sum_{i=1}^{n_{k-1}} p_i(t_{k-1,m_{k-1}}) \cdot w_i(k-1)}{p_i(t_{k,1})},$$

where:

$k = k^{th}$ rebalancing period,

$w_i(k)$ = weight for stock i in the k^{th} rebalancing period,

$w_i(k-1)$ = weight of stock i in the $(k-1)^{th}$ rebalancing period,

n_k = number of stocks in the index in the k^{th} rebalancing period,

n_{k-1} = number of stocks in the index in the $(k-1)^{th}$ rebalancing period,

m_{k-1} = count of time points in the $(k-1)^{th}$ rebalancing period,

$t_{k-1,m_{k-1}}$ = last time point in the $(k-1)^{th}$ rebalancing period,

$p_i(t_{k-1,m_{k-1}})$ = adjusted price of stock i in the last time point in the $(k-1)^{th}$ rebalancing period,

$p_i(t_{k,1})$ = adjusted price of stock i in the first time point in the k^{th} rebalancing period

V. Historical Back-testing of the Economic Castle

A. Data

Though this paper focuses primarily on the criteria for calculating the Valuentum Economic Castle Index on an ongoing basis, we think a back-testing of the efficacy of investing in a cohort of equities with strong Economic Castle ratings is par for the course for such a paper.

Weekly stock pricing data from publicly-available sources was applied in the accompanying study. Though daily data was available for the analysis, weekly data was used for several reasons:

- 1) We do not want to give the impression of false precision. Economic Castle ratings are assigned in part on the basis of forward projections at any point in

time, so replicating the exact constituent construction of a hypothetical Valuentum Economic Castle Index in the past--before the Economic Castle rating was developed--is itself a limiting and elusive task.

2) Because of the inability today to derive past Economic Castle ratings, which are based on subjective criteria in the past, we've opted in the study to also modify the reconstitution and rebalancing criteria, which if applied and daily data were used, would only add more noise to the work and offer little further analytical value, if at all.

3) Investors looking for an edge with Economic Castle ratings have a longer holding period relative to traders and speculators that may be interested in intra-day and daily movements. Therefore, the difference between analyzing the performance of a cohort of stocks with strong Economic Castle ratings on a weekly or daily increment is inconsequential to those that may be most interested in such findings.

The pricing data used in the study accounts for stock splits and dividends and reflects the total return measure, or what individuals would have received in capital gains and dividends during the measurement period.

B. Measurement

The historical back-testing of the hypothetical Valuentum Economic Castle Index covered a period from January 5, 2004, to March 16, 2015. The study spanned approximately 10 years, a time horizon that considered a variety of different economic cycles, including the Financial Crisis.

Because Economic Castle ratings cannot be feasibly derived in the past, in the study we used constituents of the existing Valuentum Economic Castle Index at the time of this writing, where data was available during the historical measurement period. On January 5, 2004, the Index was initiated with a value of 100,000, and 23 stocks of the current 27 stocks were selected and equally-weighted to create the hypothetical index.

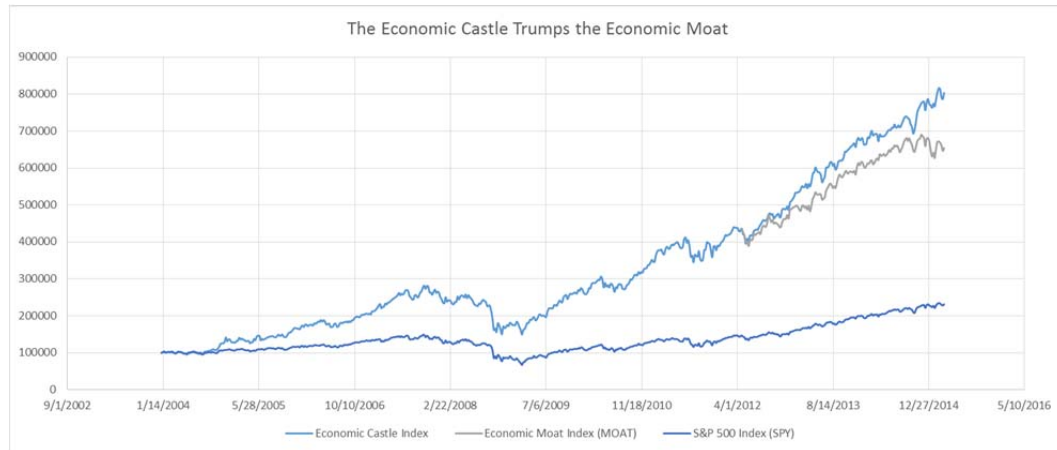
Reconstitution and rebalancing were performed to include the additional 4 securities until 27 equally-weighted stocks comprised the Index. Reconstitution and rebalancing were completed on July 13, 2004, when Domino's Pizza (DPZ) was added to the Index, on November 10, 2006, when Capella Education (CPLA) was added to the Index, on June 15, 2010, when CBOE (CBOE) was added to the Index, and finally on August 9, 2013, when Franks International (FI) was added to the Index.

Table 3: Reconstitution and Rebalancing Schedule

Company	Symbol	Reconstitution and Rebalancing Date
Domino's Pizza	DPZ	7/13/2004
Capella Education	CPLA	11/10/2006
CBOE	CBOE	6/15/2010
Franks Intl	FI	8/9/2013

C. Results & Observations

Image 2: Performance of the Valuentum Economic Castle Index



The consistent outperformance of the grouping of equities with strong Economic Castle ratings is shown in the graphical representation above. During the measurement period, the hypothetical Valuentum Economic Castle Index significantly outperformed S&P 500 companies from the beginning of the study and performed materially better than the proxy for value-oriented, wide-moat equities, as measured by the Market Vectors Mstar Wide Moat ETF (MOAT), since April 2012, or for as long as the data is available.

Individual constituent attribution analysis shows Apple (AAPL), HollyFrontier (HFC), Domino's (DPZ), and Express Scripts (ESRX) as the primary drivers behind the material alpha generated by the index during the time horizon studied. Relative laggards included "newly-added" Franks (FI), Cogent (CCOI), H&R Block (HRB), and EMC Corp (EMC). Given the strength of many of the constituents in this back-testing, we don't think survivorship bias is relevant, and we point to the addition to the Index of one of the market's best performers (Apple) as a distinct positive, though the company's returns assuredly helped to drive a significant portion of the relative outperformance.

Table 4: Constituent Attribution Analysis

Valuentum Economic Castle Index		
Name	Ticker	Return from Addition
Domino's Pizza	DPZ	1367%
Capella Education	CPLA	172%
H&R Block	HRB	66%
Reynolds American	RAI	821%
Lancaster Colony	LANC	198%
Colgate-Palmolive	CL	249%
Alliance Resource Partners	ARLP	659%
HollyFrontier	HFC	1664%
Franks Intl	FI	-32%
Moody's	MCO	288%
Factset Research	FDS	604%
CBOE	CBOE	110%
AmerisourceBergen	ABC	823%
Chemed	CHE	364%
Express Scripts	ESRX	945%
Raytheon	RTN	378%
Northrop Grumman	NOC	394%
FEI Co	FEIC	221%
ARM	ARMH	715%
EMC Corp	EMC	92%
Apple	AAPL	8125%
Sealed Air	SEE	112%
Tupperware	TUP	443%
Southern Copper	SCCO	648%
American Tower	AMT	674%
Cogent Comm	CCOI	11%
AT&T	T	125%

The magnitude and consistency of the relative outperformance generated by the Valuentum Economic Castle Index are nothing short of remarkable. The Index outperformed both the S&P 500 and the proxy for value-oriented, wide-moat equities in *every* year during the study, with the exception of only 2008, and only as it relates to the relative comparison with the Morningstar Wide Moat Focus Index (MWMFTR) for that year. The Morningstar Wide Moat Focus Index, which has a longer history than the MOAT, tracks the performance of the 20 most attractively-priced companies with sustainable competitive advantages according to the Morningstar Team.

Table 5: Annual Returns of the Valuentum Economic Castle Index

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	YTD
Economic Castle Index	36.22%	26.40%	20.83%	22.98%	-26.06%	49.58%	23.24%	12.55%	27.93%	32.25%	14.21%	4.34%
"Wide Moat" Index (MWMFTR)		4.67%	17.72%	-1.31%	-19.58%	46.93%	8.57%	6.61%	24.50%	31.46%	9.68%	1.57%
"Wide Moat" ETF (MOAT)										24.39%	9.13%	0.87%
S&P 500	9.60%	6.99%	12.30%	2.41%	-32.08%	27.99%	11.92%	0.78%	17.15%	26.87%	13.74%	2.12%

The Valuentum Economic Castle Index has the capacity to generate significant outperformance during various economic environments and market conditions. We observe, however, that it is not completely shielded from periods of economic weakness or from a tightening credit environment, as evidenced by the Index's performance during the Financial Crisis. Even though the Index did not hold a banking institution, its value still faced pressure during the tumultuous times of 2008. Not only did the Index recover after the March 2009 bottom, however, it has continued to add to its outperformance gap through the present day.

The outperformance of the Valuentum Economic Castle Index relative to the proxy for value-oriented, wide moat equities showcases the difference between castle and moat investing. Moat and castle analyses are distinct and separate processes that result in unique return profiles for respective candidates over various time periods. We expect the strongest economic-value creators, or Economic Castles, to be the best performers during certain phases of the economic cycle. The present study supports such a view as the Valuentum Economic Castle Index outperformed during *every* phase of the economic cycle (2004-2006, 2007-2010, and 2011-2015).

D. Limitations

The back-testing of the hypothetical Valuentum Economic Castle Index reveals outperformance during the measurement period, but we think a number of limitations to the study should be surfaced.

Economic Castle ratings are assigned in part on the basis of forward projections at any point in time, so replicating the exact constituent construction of a Valuentum Economic Castle Index in the past--before the Economic Castle rating was developed--is an elusive task. Said differently, the constituents of a real-time Valuentum Economic Castle Index on January 5, 2004, would be different than the Index used in the study that began on the same date.

Because of the inability today to derive past Economic Castle ratings, which are based on subjective criteria in the past, we've opted in the study to modify the reconstitution and rebalancing criteria, instead choosing to phase in new additions once their stock begins trading. The ongoing Valuentum Economic Castle Index has quarterly reconstitution and rebalancing periods, which is an inconsistency.

We cannot ignore the significant boost to the Index that constituent Apple had on returns. Though an Index that identifies one of the best market performers during the measurement period shouldn't be punished for doing so, we don't think companies like Apple come around that frequently. Investors that are intrigued by the Economic Castle process should know that catching future vast outperformers is not guaranteed.

Despite the well-documented structural shortcomings of any historical back-testing that measures a unique, forward-looking metric, the study is informative and analytically-rich enough in substance to warrant further research. The next edition of this paper will include updated performance of the Valuentum Economic Castle Index and provide adjusted back-tested returns, excluding Apple from the index construction. Further studies may relax sector criteria to arrive at another “Castle” Index that houses just the strongest economic-profit generators in the economy.

To inquire about the Economic Castle rating or the Valuentum Economic Castle Index, please contact us at info@valuentum.com.

Appendix – What Is an Economic Castle?

By Brian Nelson, CFA

“In business, I look for economic castles protected by unbreachable moats.” – Warren Buffett

In the world of investing, no other saying is more widespread. The teachings of Berkshire Hathaway’s (BRK.A, BRK.B) Warren Buffett have become a favorite among individual investors, having been adopted by money-management firms and sell-side firms alike in order to better connect with their clients and readers who have been ‘under siege’ by the topic in recent years. The phrase ‘economic moat’ – or sustainable competitive advantage – has simply become ubiquitous in the investment world and has lost much of its significance and meaning along the way.

Most management teams across the globe are now eager to tell you about their very own ‘economic moat,’ while almost every sell-side research firm will mention the moaty characteristics of a company’s division or the moaty characteristics of a firm’s enterprise. Flipping on CNBC for a couple hours will have a guest or two that says that his/her favorite idea “has a nice moat.” I, for one, love talking about Valuentum’s economic moat, too! Our firm has a variety of sustainable advantages, but we know that the real value of the firm is based on its future free cash flow stream and its net balance sheet (net cash position), and not based on my qualitative opinion of competitive advantages. The meaning behind the concept of an ‘economic moat’ has, for the lack of a better word, become meaningless. Until the time where stocks are priced by the size of their moat or in ‘number of moats,’ and not by the size of their future free cash flow stream or in a specific currency, an ‘economic moat’ assessment will never trump that of an in-depth cash-flow-derived valuation process.

The pioneer of the ‘economic moat’ concept is Michael Mauboussin, and his work at Credit Suisse in 2002 has paved the way for widespread application of the medieval nomenclature across a broad swath of investment frameworks. He states that sustainable value creation is rare and sustainable competitive advantages are even ‘more rare’ (given that a firm must perform not only better than its cost of capital but also better than its peer group to achieve both). The widely accepted view within the investment community is that at some point in the future, competitive forces will erode a firm’s competitive advantages and drive return on new invested capital (RONIC) to a company’s cost of capital (WACC). This very dynamic is embedded within the framework of the three-stage discounted cash-flow model we use at Valuentum, where we fade a company’s RONIC at the end of Stage I to its WACC at the end of Stage II.

The concept of an economic moat – or sustainable competitive advantages – focuses purely on the sustainability and the duration of the competitive advantages that a firm possesses. The concept of an economic moat does not consider the cumulative sum of a firm’s potential future economic profit creation, but only that at some point in time in the future, a moaty company will continue to have an economic profit spread and a no-moat firm will not. Let’s examine the

problem that arises by focusing exclusively on companies that have economic moats, or sustainable and durable competitive advantages.

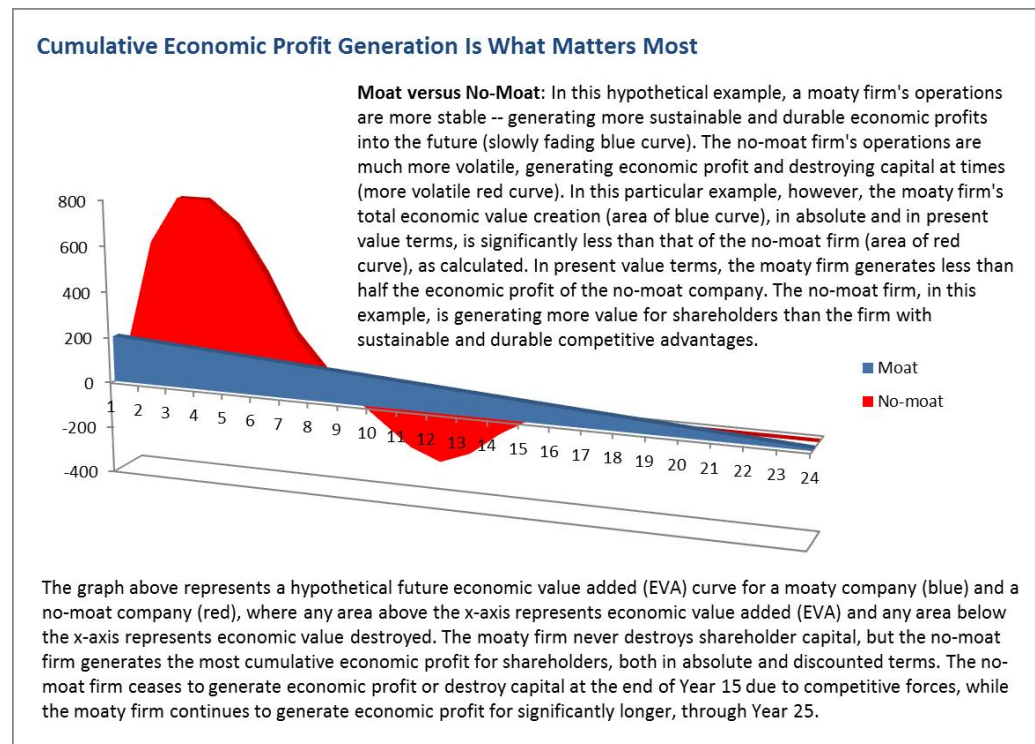


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The problem with using solely an economic moat framework to assess businesses becomes readily apparent in the above example. Though moaty firms are durable and sustainable businesses, they may not be the best value-generators for shareholders. To business owners, this issue is very clear. Business owners want to maximize shareholder value – and a firm's competitive advantage assessment may be independent of that view. Business owners want to generate the most economic value.

Before moving on, let's clarify one concept. The trajectory of a firm's economic value creation (or the blue and red areas in the graph above) is not equivalent to the trajectory of a firm's stock price. A firm's valuation, which is used to identify stock mispricings, already embeds the future economic value creation, as it is a function of 'earnings before interest,' which itself is the primary driver behind future free cash flows to the firm (enterprise cash flows) – or that which we use in our valuation framework at Valuentum. Said differently, the above graph shows pure economic value-creation, or in other words, the spread between a firm's return on invested capital and its cost of capital. It's possible, though unlikely, that the stock price volatility of the no-moat stock above can be less than that of the moaty stock. I say this to drive home the differences between stock price volatility, which is based on expectations revisions, and economic profit volatility, which is based on fundamental business dynamics.

Regarding a moaty firm's or a no-moat firm's stock price, if the firm is fairly valued, the stock will already reflect its respective forecasted economic profit trajectory. As Moubassin puts it in his paper, under a scenario where the equity is fairly priced, investors should expect a risk-adjusted market return. The value of fairly-priced moaty stocks, which tend to be less risky, will advance at a lower annual pace than the value of fairly-priced no-moat stocks due in part to the lower risk-adjusted discount rate applied to their respective future free cash flow stream. Generally speaking, a firm's intrinsic value will advance at the annual pace of its corresponding discount rate less its dividend yield. Since moaty firms generally have lower discount rates and pay dividends, the pace at which their fair values increase in any given year will trail that of a no-moat firm, assuming the future forecasts are accurate. Intrinsic value estimates are never static.

What we are after as investors, as Moubassin states in his paper, is anticipating revisions in expectations of financial performance. Is a no-moat's economic value trajectory correctly priced in? Is a wide moat's economic value trajectory overvalued? Is a no-moat firm's economic value trajectory undervalued? The economic moat concept is less important to the valuation and global investment framework than the actual future economic value stream of each individual company. In Valuentum parlance, this means that we're looking for companies in the global investment universe that have mispriced future economic value streams (i.e. stocks that are underpriced relative to their discounted future free cash flows and net balance sheet impacts) and are just starting to have their 'expectations revised' by market participants (i.e. their equities are just starting to be purchased). We call these stocks Valuentum stocks – underpriced stocks that are just starting to go up.

Let's take a look at a few examples to further illustrate the importance of cumulative economic value versus the sustainability and duration of economic value. Without question, railroads are fantastic businesses. North American railroads operate as an oligopoly, benefit from substantial barriers to entry, and boast significant pricing power – all good things. The group's returns on invested capital won't be but a few percentage points greater than their cost of capital at any point in time, but absent any abnormal shocks to the business, the railroad group will likely add a modest amount of economic value year after year – also a good thing. The economic value in this case represents the value the business generates via its economic profit spread (ROIC less WACC) and differs from the pace at which a company's fair value will increase, which on an annual basis is a function of its discount rate less its dividend yield. Let's use the 'Return on Invested Capital' graph from Union Pacific's (UNP) 16-page research report (page 2) to illustrate the concept of sustainability and duration of future economic value creation:

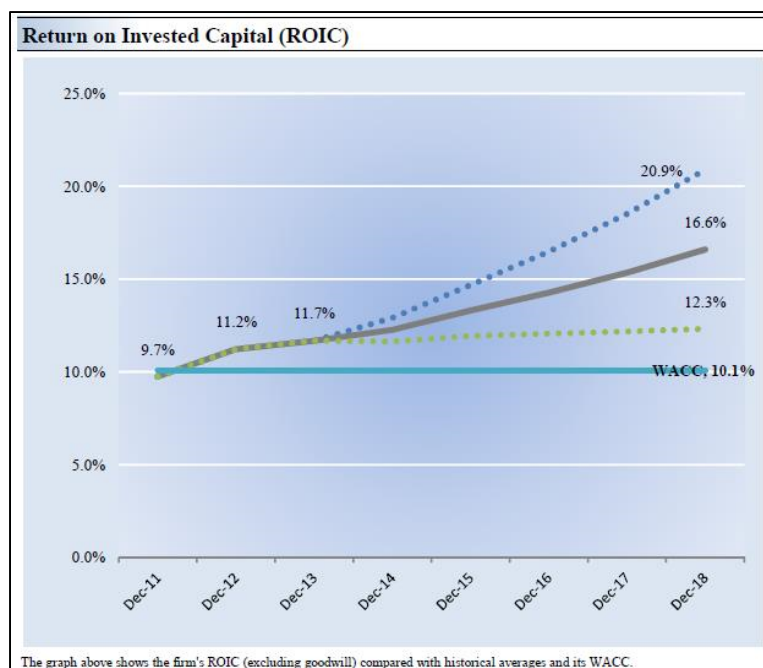


Image Source: Union Pacific's 16-page report

As the chart above shows, we expect Union Pacific to continue generating economic value (ROIC less WACC) for shareholders for the foreseeable future. In fact, if we were to extend this chart over the next couple decades, the railroad's economic value trajectory may look a lot like the hypothetical example we used previously (the steadily declining blue line). Union Pacific is a strong company – it is a Best Ideas portfolio holding – but will such a moaty railroad ever generate as much value as another firm like Apple (AAPL), for example?

The answer to us is clearly 'no.' Apple's 'Return on Invested Capital' graph from its 16-page report (page 2) shows a significantly larger economic value spread. It can be reasonably argued that Apple will generate more economic value for shareholders in the next 5 years than Union Pacific will for the remainder of its corporate life. This is a key concept to understand. The magnitude of Apple's economic profit spread over the next five years alone may be a few hundred times that which Union Pacific will ever generate, and this excludes a time value of money adjustment. The sustainability and duration of Apple's and Union Pacific's future economic profit spread is less important than the cumulative economic value that each firm delivers to shareholders. Business owners want the most economic value.

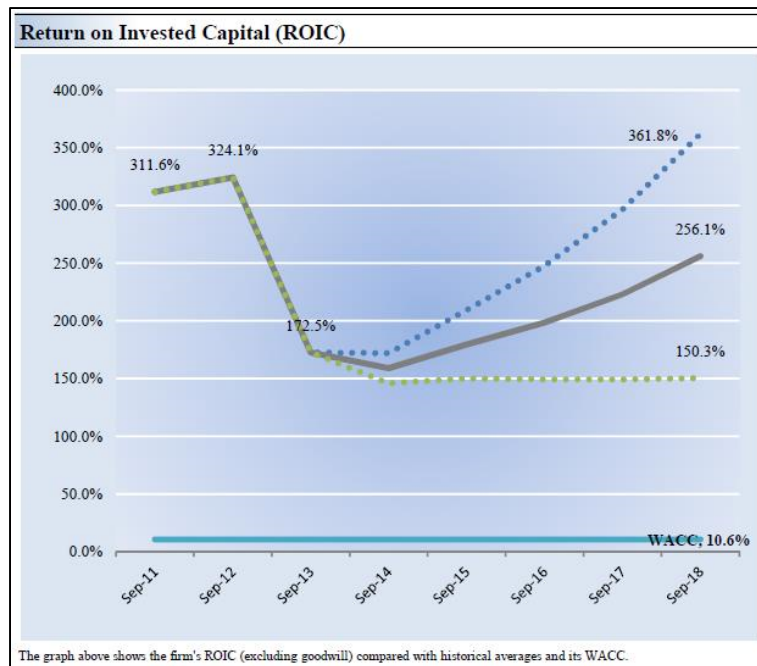


Image Source: Apple's 16-page report

Let's use Facebook (FB) as another example. The social networking giant clearly benefits from a hugely popular network effect. We expect its economic value creation to continue for many years to come – in fact, we expect its economic value expansion to accelerate in coming years. The duration of Facebook's economic value creation or competitive advantage period is less important than the absolute and discounted economic value that it delivers to shareholders. In fact, one could argue that since the near term is more predictable than the long term that a front-end loaded economic value stream is preferable to a long-dated and slim economic value stream. The following is an excerpt from Facebook's 16-page research report (page 2):

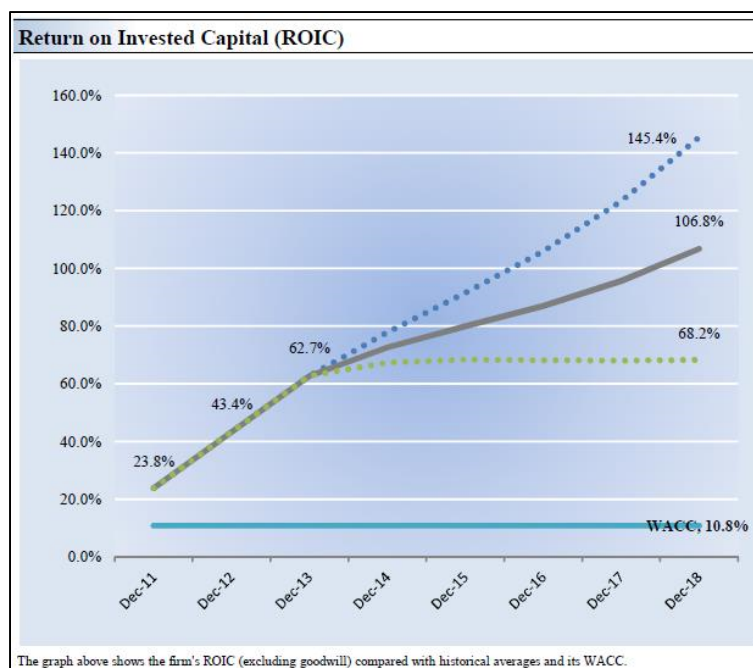


Image Source: Facebook's 16-page report

Enter Valuentum's Economic Castle™ Rating

The sustainability and duration of a firm's economic value creation – or its competitive advantage period – tells us little about a company's economic castle, or the magnitude of the value creation that it is expected to deliver to shareholders. Though a focus on economic moats is important to Warren Buffett's process, identifying "economic castles," or those that will deliver the most value to shareholders may be equally, if not, more important to an investor's process. We are keeping the horse before the cart.

Valuentum's Economic Castle™ rating assumes that 'economic profit' (as measured by ROIC less WACC) is the primary factor in assessing the value that a company generates for shareholders. Whereas an economic moat assessment evaluates a firm on the basis of the sustainability and durability of its economic value creation stream, Valuentum's Economic Castle™ rating evaluates a firm on the basis of the magnitude of the economic profit that it will deliver to shareholders (as measured by its ROIC-less-WACC spread). Firms with the best Valuentum Economic Castle™ ratings are poised to generate the most economic value for shareholders, regardless of their competitive positions.

Valuentum's Economic Castle™ rating is based on two considerations:

1) the framework behind Valuentum's proprietary ValueCreation rating:

ValueCreation indicates the firm's historical track record in creating economic value for shareholders, taking the average difference between ROIC (without goodwill) and the firm's estimated WACC during the past three years. The firm's performance is measured along the scale of EXCELLENT, GOOD, POOR, and VERY POOR. Those firms with EXCELLENT ratings have a demonstrated track record of creating economic value, while those that register a VERY POOR mark have been destroying economic value. The ValueCreation rating can be found on the second page of each company's 16-page report.

2) a forward-looking assessment of a firm's expected economic returns over the immediate five-year period

Our view is that the most economic value for the largest value-contributors will be generated over the immediate forward five-year period. These returns are not weighed down by the compounding dynamics of a discount rate and are not nearly as exposed to the forecasting error that occurs in later stages within any modeling framework. A firm that is generating an economic profit spread of 100 or so percentage points may generate more value for shareholders over a shorter time period than one that generates 1 or 2 percentage points each year for decades into the future.

Examples of Highly-Rated Economic Castles

Highly-rated Economic Castles can be underpriced, fairly-priced, or overpriced. Though the economic value framework and the discounted cash-flow framework are interdependent and correlated, the Valuentum Economic Castle™ rating is independent of a firm's price-to-fair value assessment. The rating considers the magnitude of the economic value that a firm will generate for shareholders (as measured by the ROIC-less-WACC spread), in the same light that the concept of an economic moat considers only the sustainability and durability of a firm's economic profit spread.

Apple (AAPL) – ValueCreation rating: EXCELLENT – Economic Profit Spread, 5-year projected average: 192.6 percentage points.

Domino's Pizza (DPZ) – ValueCreation rating: EXCELLENT – Economic Profit Spread, 5-year projected average: 260.3 percentage points.

Microsoft (MSFT) – ValueCreation rating: EXCELLENT – Economic Profit Spread, 5-year projected average: 79.8 percentage points.

MasterCard (MA) – ValueCreation rating: EXCELLENT – Economic Profit Spread, 5-year projected average: 73.1 percentage points.

Google (GOOG) – ValueCreation rating: EXCELLENT – Economic Profit Spread, 5-year projected average: 69.4 percentage points.

This study discusses backtested information. The Best Ideas Newsletter portfolio and Dividend Growth Newsletter portfolio are not real money portfolios. The hypothetical illustrations of the Economic Castle Index and Dividend Cushion Index are not exact representations of any particular strategy or investment and do not represent actual trading. Actual results may differ from simulated information, results, or performance being presented.

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