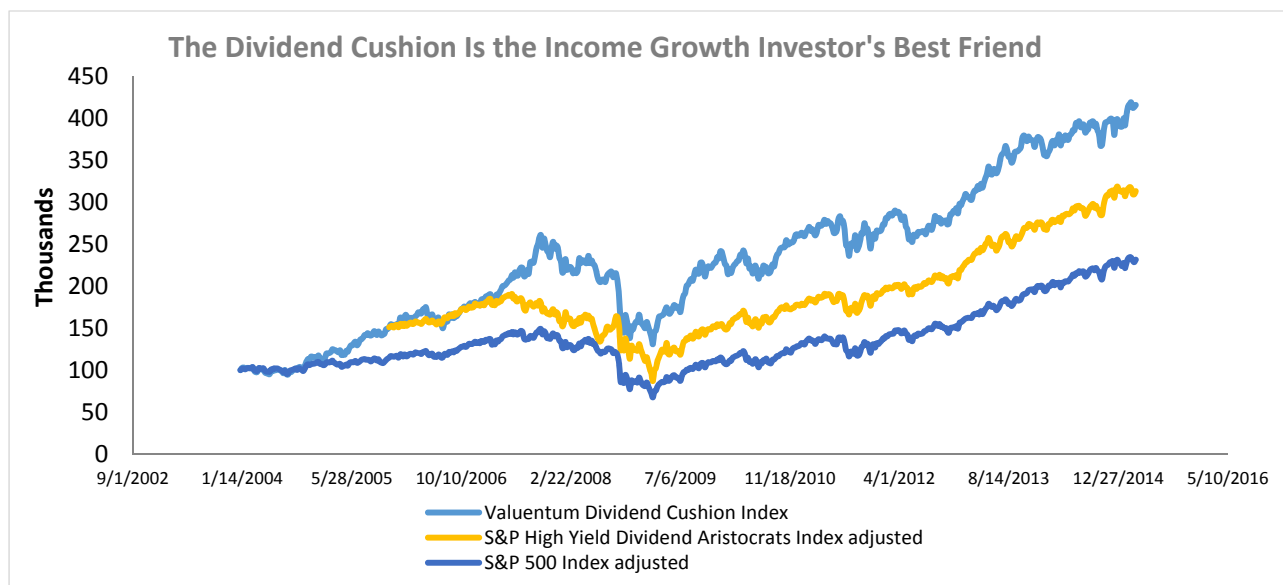




## The Dividend Cushion Beats the Aristocrats

**Authored by:**  
Brian Nelson, CFA  
Tatiana Dmitrieva  
Andy Ngwaba

First Version: May 2015



### Abstract

A prolonged period of low interest rates has driven income investors to dividend growth investing as a way to achieve retirement goals. Traditional dividend growth analysis has rested on evaluating a company's dividend payout ratio and its track record of historical consecutive annual dividend increases. A supplement to these approaches, the forward-looking, cash-flow-based Dividend Cushion ratio maps a company's future expected free cash flows to its future expected cash dividends paid (after considering balance sheet health) and has shown to be a superior indicator of both dividend growth (risk) and total return relative to other dividend growth analytical processes. The results in this paper showcase the outperformance of a select number of high-yielding equities with strong Dividend Cushion ratios relative to both S&P 500 firms and companies with decades of consecutive annual dividend increases.

© Valuentum Securities. All rights reserved.

-----

\* Brian Nelson, MBA Graduate School of Business, University of Chicago, is President of Equity Research and ETF Analysis at Valuentum Securities, Inc, an independent investment research firm serving individual investors, financial advisors, and institutional money-managers. Special thanks to the students at Northern Illinois University and the dozens of analysts and colleagues at Morningstar and Driehaus Capital Management for the thoughts and comments that ultimately shaped this analysis. The views expressed in this paper are those of the authors and may not reflect those of any institution mentioned in this piece.

## I. Introduction

### A. Overview

Traditional dividend growth analysis has centered on evaluating a company's dividend payout ratio and its historical track record of consecutive annual dividend increases. As a comprehensive cash-flow-based dividend coverage ratio that also considers the health of a company's balance sheet, the newly-developed Valuentum Dividend Cushion ratio [see Appendix] offers a supplemental way to evaluate the future growth potential of a firm's dividend. A Dividend Cushion ratio significantly above 1 indicates material coverage of future dividend payments with expected financial resources, while a ratio materially below 1 indicates heightened long-term risk related to the sustainability of the dividend.

The Dividend Cushion ratio focuses on mapping a company's future expected free cash flows to its future expected cash dividends paid and considers the balance-sheet net cash or net debt position of the firm. The measure is a comprehensive assessment of dividend safety relative to the widely-used dividend payout ratio, which compares a company's accounting earnings per share to that of its dividends per share in any given year. Accounting measures are impacted by accrual items and may not be an accurate representation of a company's ability to pay out cash dividends to shareholders.

A simple glance, for example, at Cliffs Natural Resources' (CLF) adjusted dividend payout ratio in 2012 of 72.5% (annual dividend payout of \$2.50 per share divided by adjusted earnings per share of \$3.45) suggested the dividend was safe for the current year. However, the firm's Dividend Cushion ratio of 0.6 signaled a material risk to the sustainability of the dividend, and Cliffs followed through with a cut in the beginning of 2013. Such an adverse event happened again at the firm in 2015, while Cliffs posted a Dividend Cushion ratio of -5.2 (negative 5.2).

In assessing dividend growth, the historical track record of consecutive annual dividend increases reveals the *willingness* of management to keep raising the dividend. The forward-looking, cash-flow-based Dividend Cushion ratio reveals the *capacity* of a company to keep raising the dividend. For a company to achieve fantastic dividend growth in the future, both capacity and willingness must be present. Traditional indices such as the S&P High Yield Dividend Aristocrats Index (SDY) only consider constituents that have followed a policy of consistently increasing dividends each year. The cash flow capacity for future dividend increases is not a core consideration in widely-available indices, but we think it is a paramount one.

As a result, we have constructed the Valuentum Dividend Cushion Index to monitor the performance of a basket of high-yielding equities with the strongest Dividend Cushion ratios. The index represents a collection of equities with substantial excess capacity for future dividend increases, regardless of their historical dividend track records.

## B. Methodology

### 1. How the Dividend Cushion Ratio Is Calculated

Unlike the dividend payout ratio, the Dividend Cushion ratio considers the balance sheet health of a company. In doing so, it acknowledges the scenario where companies can access the balance sheet to support the dividend when near-term operating (free) cash flow shortfalls are present.

All else equal, a firm with billions of net cash on the balance sheet is better positioned to keep paying a dividend than a firm with billions of net debt on the balance sheet. More cash on the books relative to debt reveals significantly more financial flexibility. The dividend payout ratio ignores this important concept, while the Dividend Cushion ratio embraces it.

A raw, unadjusted Dividend Cushion ratio, as that applied in the analysis in this paper, does not consider the potential for future debt or equity issuance as a source of cash. Because the capital markets are least accessible at times of most need, the Dividend Cushion ratio therefore captures the magnitude of firm's refinancing risk, a source of uncertainty related to the sustainability of the dividend. Adjusted Dividend Cushion ratios for non-corporate entities such as master limited partnerships (MLPs) and real estate investment trusts (REITs) are made available, but the definitions are beyond the scope of this piece.

The Dividend Cushion ratio is derived directly from line items on a company's financial statements. Balance sheet items are recorded from the last fiscal year end, while the Valuentum Team's future expectations of a company's free cash flow and dividend growth within the discounted cash flow valuation process are used in the analysis. Because forecasts are analyst-driven and based on the research of the Valuentum Team, the Dividend Cushion ratio cannot be replicated using widely-available historical or forecasted data. The financial equation to calculate a firm's Dividend Cushion ratio is as follows:

$$\sum_{t=1}^5 [A(t) - B(t)] + C(0) - D(0)$$

---

$$\sum_{t=1}^5 E(t)$$

*where:*

A = cash flow from operations (from the operating section of the cash flow statement),

B = capital expenditures or additions to property plant and equipment (from the investing section of the cash flow statement),

C = cash and cash equivalents (from the balance sheet),

D = long-term debt\*\* (from the balance sheet), and

E = cash dividends paid (from the financing section of the cash flow statement).

A(t) is generally a positive number,

B(t) is a positive number,

The difference  $C(0) - D(0)$  could be negative or positive,

E(t) is a positive number.

Scale: Above 2.75 = EXCELLENT,

Between 1.25 and 2.75 = GOOD\*,

Between 0.5 and 1.25 = POOR\*,

Below 0.5 = VERY POOR.

\* The Valuentum Team may assign a qualitative rating of either GOOD or POOR depending on a variety of factors for companies bordering the GOOD/POOR breakpoints.

\*\* The Dividend Cushion ratio does not penalize companies for their short-term debt position and makes the assumption that the firm will satisfy such near-term obligations without the incidence of default.

Please consider this example that walks through the calculation of the Dividend Cushion ratio for Microsoft (MSFT). Suppose the following data is retrieved from the company's regulatory filings and from the Valuentum Team's forecasts of Microsoft within its discounted cash flow valuation model.

Cumulative 5-year Forecasted Cash from Operations (CFO)	\$190,536
Cumulative 5-year Forecasted Capital Expenditures (capex)	\$34,344
Total Cash - Last Fiscal Year	\$85,709
Total Long-term Debt - Last Fiscal Year	\$20,645

Cumulative 5-year Forecasted Dividends Paid (from CF statement)	\$67,015
---	----------

First, to derive a company's Cumulative 5-year Forecasted Free Cash Flow, we subtract capex from the Cumulative 5-year Forecasted Cash from Operations, resulting in \$156,192. Second, we calculate net cash (total cash less total long-term debt), which is \$65,064. Third, we sum Cumulative 5-year Forecasted Free Cash Flow and Net Cash, arriving at \$221,256 in this example. Finally, we divide \$221,256 by \$67,015, the latter the cumulative 5-year Forecasted Dividends Paid, to arrive at the Dividend Cushion ratio.

Cumulative 5-year Forecasted Cash from Operations (CFO)	\$190,536
Cumulative 5-year Forecasted Capital Expenditures (capex)	-\$34,344
Total Cash - Last Fiscal Year	+\$85,709
Total Long-term Debt - Last Fiscal Year	-\$20,645
Dividend Cushion Numerator	= \$221,256
Dividend Cushion Denominator	: \$67,015
Valuentum Dividend Cushion	= 3.30

In this example, Microsoft's Dividend Cushion ratio is 3.3 (greater than 1.25 = good). The company can cover its growing dividend with expected free cash flow and its net cash position more than 3 times over the measurement period. With respect to this analysis, Microsoft has fantastic dividend growth prospects on the basis of both its cash-flow profile and balance sheet.

A rolling 5-year forecast period is applied in the Dividend Cushion analysis for a couple reasons:

- a) Many market participants may only focus on a company's operations over the next year or two, and we think a slightly longer horizon is appropriate to highlight unique risks that go unnoticed by investors. Financials over the immediate 5-year forward period can be reasonably estimated without the forecasting error related to longer duration analysis.
- b) A time horizon significantly greater than 5 years would deemphasize the importance of the balance sheet in assessing dividend health. By theoretically

“accelerating” debt payments, the Dividend Cushion ratio separates those with excess potential financing capacity, a source of incremental cash, from those with looming balance sheet trouble, which could limit financial flexibility.

## **2. Division into Sectors**

All companies in our coverage universe are separated into 9 sectors that are derived by the Valuentum Team: Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, and Telecom Services.

## **3. Multiplicative Outcome**

The term “Multiplicative Outcome” is unique to Valuentum. It represents the Dividend Yield multiplied by Dividend Cushion ratio and can be calculated for every firm for which both data points are available. We believe that by calculating the product of a company’s Dividend Yield and Dividend Cushion ratio, we arrive at an informative ranking measure that considers both current income and dividend growth, respectively.

# **II. Index Characteristics**

## **A. Structure of the Valuentum Dividend Cushion Index**

To create the Valuentum Dividend Cushion Index, we select three representative firms from each of the 9 sectors. When all criteria for construction are satisfied, there are 27 companies (9\*3) in the index. If all relevant criteria are not met, we assign as many companies that meet the relevant criteria (up to 3 per sector), even if the number is less than 27. The weights between the firms are distributed equally.

Such a construction process ensures adequate sector diversification in order to focus on the contributions of the Dividend Cushion ‘factor.’ In a similar spirit, the equal-weighting of each firm within the Valuentum Dividend Cushion 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 Dividend Cushion ‘factor.’ Other factors such as size, value, earnings growth, and volatility are not criteria for inclusion to the Index.

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

## **B. Details**

### **1) Inception Date**

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

## **2) Frequency of Calculations**

The Valuentum Dividend Cushion Index values are calculated weekly<sup>1</sup>.

## **3) Scheduled Reconstitution Date**

The Valuentum Dividend Cushion 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 Dividend Cushion 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 Dividend Cushion Index between reconstitution and rebalancing periods, it is deleted from the index and is replaced by the next eligible company in the same sector. The new stock will be assigned the same weight as the stock dropped, as of the effective date.

# **III. Assigning Stocks to the Valuentum Dividend Cushion Index**

## **A. Eligibility**

Stocks eligible for inclusion to the Valuentum Dividend Cushion Index are limited by the number of firms within Valuentum's equity coverage universe, in which Dividend Cushion ratios can be calculated. All firms in which a Dividend Cushion ratio is calculated by the Valuentum Team are eligible for inclusion to the Index.

We exclude MLPs, REITs, banks, and insurers. Because REITs and MLPs distribute a large portion of their earnings to shareholders each year, their raw, unadjusted Dividend Cushion ratios are VERY POOR, and as such, we have excluded them, in aggregate, from the Index. Such entities are unable to build meaningful cash "cushions" on the balance sheet.

---

<sup>1</sup> The frequency of calculations is subject to change in the event of commercialization.

We exclude banks and insurance companies from the index because “cash flow” for these entities is somewhat arbitrary (they theoretically “sell” cash, while most other corporates sell a product or service). The calculation of cash flow for banks and insurers is not as straightforward as that of a general industrial corporate, and dividend policy for banks and insurers rests more on the strength of their capital positions and the confidence of them as a going concern than any other quantitative factor.

We only consider general industrial “operating” companies (corporates) in the Index.

## **B. Selection**

After the eligibility criteria are met, we then:

- 1) remove companies that are not primarily US-based to rule out risks associated with non-US based operations, including abnormal country-specific, currency, and geopolitical risks.
- 2) narrow the remaining universe down to firms with Dividend Yields above 2% and Dividend Cushion ratios above 1.2.
- 3) calculate and sort each remaining firm by its “Multiplicative Outcome” from the largest to smallest within each of the 9 sectors.
- 4) select three of the top firms from each sector that meet the above criteria and have the highest “Multiplicative Outcome” of Dividend Yield and Dividend Cushion ratio.

In situations where there are less than three firms in a sector that meet the above criteria, that sector is under-represented in the index.

Image 1: Flow Chart

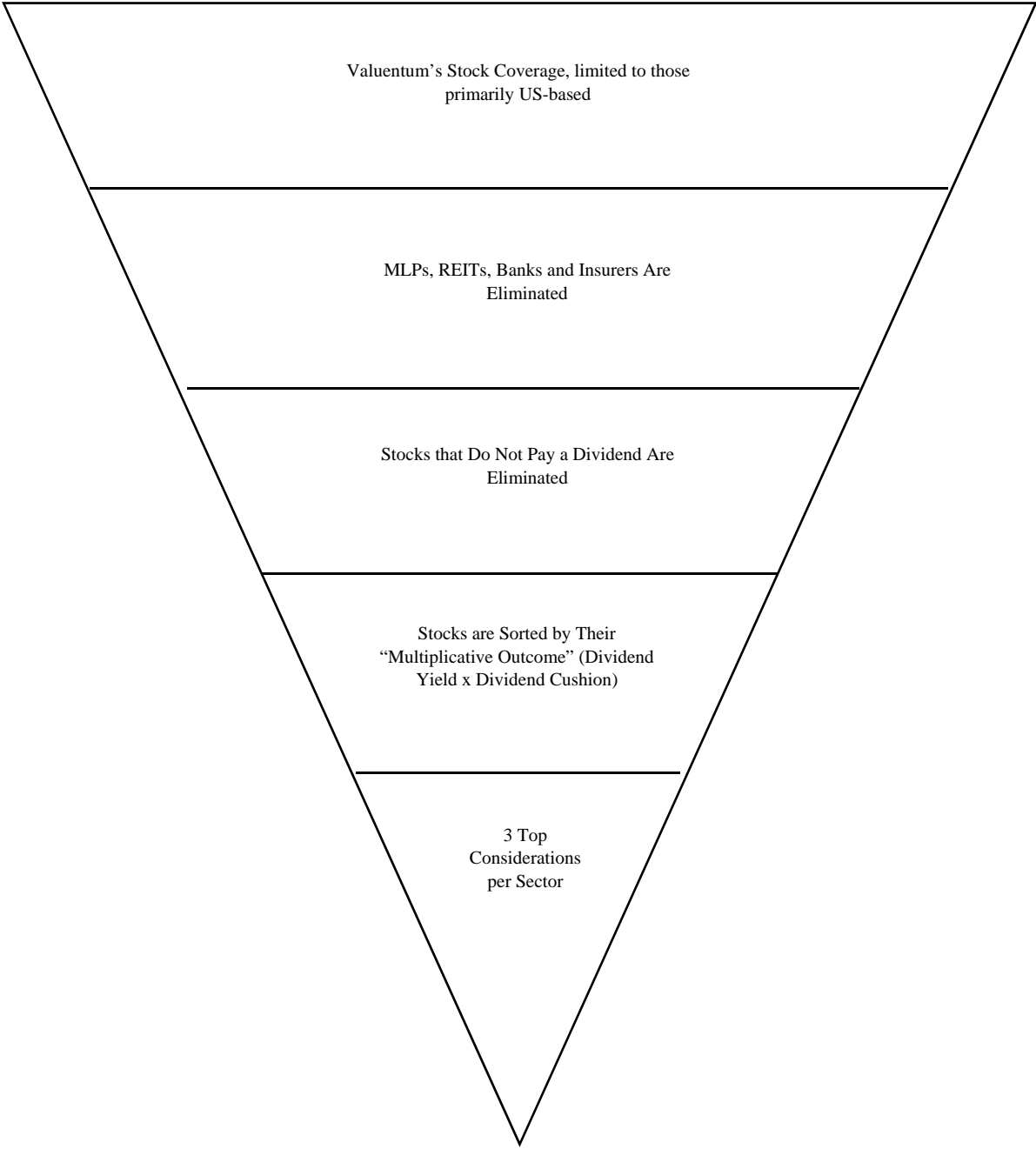


Table 1: Constituents of the Valuentum Dividend Cushion Index

Valuentum Dividend Cushion Index			
Name	Ticker	Sector	Industry
GameStop	GME	Consumer Discretionary	Specialty Retailers
Abercrombie & Fitch	ANF	Consumer Discretionary	Retail - Under 30, Off-Price, Sport Apparel
H&R Block	HRB	Consumer Discretionary	Personal Services
Johnson & Johnson	JNJ	Consumer Staples	Household Products
Dr Pepper Snapple	DPS	Consumer Staples	Beverages - nonalcoholic
Target	TGT	Consumer Staples	Food Retailers
National Oilwell Varco	NOV	Energy	Energy Equipment - Large
Phillips 66	PSX	Energy	Refiners
Entergy	ETR	Energy	Utilities - Large
Thomson Reuters Corp	TRI	Financials	Securities Research
Quality Systems	QSII	Health Care	Medical Srvc Providers
Meridian	VIVO	Health Care	Diagnostic Substances
Pfizer	PFE	Health Care	Pharmaceuticals - Big
Thor	THO	Industrials	Recreational Vehicles
Garmin	GRMN	Industrials	Electrical Equipment
Diebold	DBD	Industrials	Commercial Services
Automatic Data Processing	ADP	Information Technology	Staffing Services
AVX Corp	AVX	Information Technology	Electronic Suppliers
Insperity	NSP	Information Technology	Staffing Services
Rio Tinto	RIO	Materials	Mining - diversified
Schweitzer-Mauduit	SWM	Materials	Paper Products
DuPont	DD	Materials	Chemicals - broad
Verizon	VZ	Telecom Services	Telecom Services - diversified

#### IV. Valuentum Dividend Cushion 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,

$p_i(t_{k,\cdot}) =$  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 Dividend Cushion

### A. Data

Though this paper focuses primarily on the criteria for calculating the Valuentum Dividend Cushion Index on an ongoing basis, we think a back-testing of the efficacy of investing in a cohort of equities with strong Dividend Cushion ratios and high Dividend Yields (high “Multiplicative Outcomes”) is par for the course for such a paper. The study in this paper is limited to evaluating the total return aspects of such a cohort [see Appendix for situations where the Dividend Cushion was effective in predicting dividend cuts of individual equities].

Weekly stock pricing data from publicly-available sources was used 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. Dividend Cushion ratios are calculated in part on the basis of forward projections at any point in time, so replicating the exact constituent construction of a hypothetical Valuentum Dividend Cushion Index in the past--before the Dividend Cushion was developed--is itself a limiting and elusive task.

2) Because of the inability today to derive past Dividend Cushion ratios, 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 Dividend Cushion ratios 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 Dividend Cushion ratios and high Dividend Yields (high "Multiplicative Outcomes") 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**

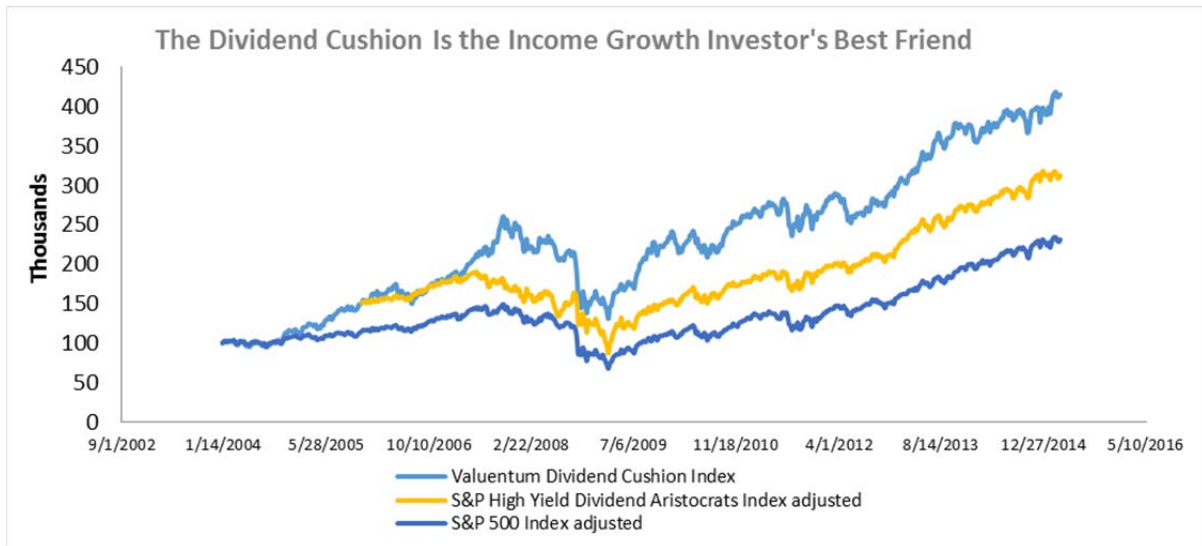
The historical back-testing of the hypothetical Valuentum Dividend Cushion Index covers a period from January 5, 2004, to March 16, 2015. The study spanned approximately 10 years, a time horizon that considered a variety of different economic cycles including the bull market and housing boom of 2004-2007, the Financial Crisis of 2007-2009, and the ensuing recovery and loose credit environment of 2009-2015.

Because Dividend Cushion ratios cannot feasibly be derived in the past, in the study we used constituents of the existing Valuentum Dividend Cushion 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 21 stocks of the current 23 stocks were selected and equally-weighted to create the hypothetical index.

Reconstitution and rebalancing were performed to include the additional 2 securities until 23 equally-weighted stocks comprised the Index. Reconstitution and rebalancing were completed on May 5, 2008 to include Dr. Pepper Snapple (DPS) and on April 16, 2012 to include Phillips 66 (PSX).

## **C. Results & Observations**

Image 2: Performance of the Valuentum Dividend Cushion Index



The relative outperformance of the grouping of equities with strong Dividend Cushion ratios and high Dividend Yields (high “Multiplicative Outcomes”) is shown in the graphical representation above. During the measurement period, the hypothetical Valuentum Dividend Cushion Index (light blue) significantly outperformed S&P 500 companies (yellow) from the beginning of the study and performed materially better than the proxy for equities that have long track records of consecutive annual dividend increases (dark blue), as measured by the SPDR S&P Dividend ETF (SDY), since November 2005, or for as long as the data is available.

Table 2: Constituent Attribution Analysis of the Valuentum Dividend Cushion Index

Valuentum Dividend Cushion Index		
Name	Ticker	Return from Addition
GameStop	GME	407%
Abercrombie & Fitch	ANF	1%
H&R Block	HRB	66%
Johnson & Johnson	JNJ	172%
Dr Pepper Snapple	DPS	254%
Target	TGT	161%
National Oilwell Varco	NOV	406%
Phillips 66	PSX	123%
Entergy	ETR	111%
Thomson Reuters Corp	TRI	61%
Quality Systems	QSII	250%
Meridian	VIVO	466%
Pfizer	PFE	48%
Thor	THO	200%
Garmin	GRMN	130%
Diebold	DBD	-11%
Automatic Data Processing	ADP	260%
AVX Corp	AVX	3%
Insperty	NSP	295%
Rio Tinto	RIO	144%
Schweitzer-Mauduit	SWM	285%
DuPont	DD	152%
Verizon	VZ	160%

Though individual constituent attribution analysis shows Meridian (VIVO), GameStop (GME), and National Oilwell Varco (NVO) as key drivers behind the alpha generated, strength was broad-based across many constituents in the Index. The decidedly positive and concentrated return distribution reveals the consistency of strong performance for equities with elevated Dividend Cushion ratios and high Dividend Yields (high “Multiplicative Outcomes”). Relative constituent laggards included Diebold (DBD), Abercrombie & Fitch (ANF), and AVX Corp (AVX).

Table 3: Annual Performance of the Valuentum Dividend Cushion Index

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	YTD
Dividend Cushion Index	17.3%	35.6%	10.3%	31.8%	-27.7%	47.1%	7.7%	1.7%	12.2%	27.3%	4.7%	6.6%
"Aristocrats" (SDY)	N/A	N/A	14.9%	-10.4%	-18.1%	21.5%	15.2%	7.7%	14.9%	25.0%	13.9%	0.1%
S&P 500 (SPY)	9.6%	7.0%	12.3%	2.4%	-32.1%	28.0%	11.9%	0.8%	17.2%	26.9%	13.7%	2.1%

The Valuentum Dividend Cushion Index has the capacity to generate significant outperformance during periods of economic strength where market valuations are reasonable (it outperformed the S&P 500 in three of the four years from 2004-2007). We also observe, however, that the Index 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 (namely in 2008). Even though the Index did not hold an MLP, REIT, bank, or insurer, its value was nonetheless punished during the year, albeit not as severely as that of the S&P 500. Following the March 2009 bottom, the Index recovered rapidly, outperforming in two of the three years from 2009-2011 (and significantly in 2009). Performance during periods of “stretched” market valuations (2012-2015), however, is mixed.

Importantly, the outperformance of the Valuentum Dividend Cushion Index relative to the proxy for equities that have long track records of consecutive annual dividend increases (“Aristocrats”) showcases the distinct difference between *capacity* and *willingness* in dividend growth analysis. Significant relative outperformance of the Valuentum Dividend Cushion Index relative to the “Aristocrats” was achieved in 2007, where firms such as GameStop, Garmin (GRMN), National Oilwell Varco, Meridian and Rio Tinto (RIO) performed incredibly well. The Valuentum Dividend Cushion Index also showed significantly more resilience “off” the market bottom in 2009, revealing more than 25 percentage points of relative outperformance during the year. In the post Financial Crisis environment, the performance of the Valuentum Dividend Cushion Index is mixed relative to the “Aristocrats.”

The aggregate evidence, however, shows that capacity is an even larger driver behind total return performance of dividend paying stocks, or at least an important consideration that cannot be ignored for investors seeking both income and total return.

Table 4. Correlation Matrix

Correlation Matrix of Annual Return			
	VDC	SDY	SPY
VDC	1.00	0.54	0.75
SDY	0.54	1.00	0.91
SPY	0.75	0.91	1.00

Table 5. Other Risk and Performance Metrics

	VDC	SDY	SPY
Beta vs. S&P 500 Index	0.95		
Correlation vs. S&P 500 Index	0.75		
Volatility (Standard Deviation)	19.4%		
Sharpe Ratio	0.58	0.37	0.32
Mean	14.6%		

#### D. Limitations

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

Dividend Cushion ratios are calculated in part on the basis of forward projections at any point in time, so replicating the exact constituent construction of a Valuentum Dividend Cushion Index in the past--before the Dividend Cushion was developed--is an elusive task. Said differently, the constituents of a real-time Valuentum Dividend Cushion 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 Dividend Cushion ratios, 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 Dividend Cushion Index has quarterly reconstitution and rebalancing periods, which is an inconsistency.

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 ongoing research. The next edition of this paper will include updated performance of the newly-created Valuentum Dividend Cushion Index and provide ongoing coverage of the analytical detail behind the sources of outperformance associated with the Index.

To inquire about the Dividend Cushion ratio or the Valuentum Dividend Cushion Index, please contact us at [info@valuentum.com](mailto:info@valuentum.com).

## **Appendix – The Dividend Cushion Is Rocking!**

February 17, 2014

*By Brian Nelson, CFA*

### **Key Takeaways:**

- The Dividend Cushion ratio is a helpful tool to predict future dividend cuts and assess the growth potential of a company's dividend.
- Since development, the Dividend Cushion ratio has predicted the dividend cuts of the following firms in real-time (i.e. Valuentum members were well aware of the significant risk to these firms' dividends before they slashed them): SuperValu (SVU), Roundy's (RNDY), Dover Downs (DDE), Strayer (STRA), Exelon (EXC), Cliffs Natural (CLF), Pitney Bowes (PBI), and CenturyLink (CTL), among others (ACI, WTW, JCP, SDRL, LGCY, BTU).
- The Dividend Cushion ratio is designed to provide the income investor with a trusted opinion of the safety and future growth potential of a firm's dividend. It not only predicts dividend cuts, but the 'cushion' behind the Dividend Cushion ratio reveals just how much capacity a firm has to continue growing its dividend in the future.
- The foundation behind the measure—assessing cash flows relative to dividend payments in the context of a firm's balance sheet—remains as relevant as ever.
- The Dividend Cushion ratio is found within each firm's Dividend Report. We update our Dividend Reports on firms regularly, and we encourage members to check the Dividend Cushion scores on their income investments at least quarterly (in accordance with our update cycle).

### **Predicting Dividend Cuts**

SuperValu (SVU), Roundy's (RNDY), Dover Downs (DDE), Strayer (STRA), Exelon (EXC), Cliffs Natural (CLF), Pitney Bowes (PBI), CenturyLink (CTL), among others (ACI, WTW, JCP, etc)...

What do these companies have in common? The Dividend Cushion ratio highlighted them as having significant dividend risk in advance of their respective dividend cuts.

Valuentum members are aware of the significant back-testing<sup>2</sup> performed to develop the Dividend Cushion ratio, a measure that compares a firm's future free cash flow generation to its future expected dividends after considering its capital structure (its net cash or net debt position).

Thus far, the Dividend Cushion ratio's track record has been near perfect—and we don't say that lightly. The measure has highlighted dividend cuts in real time, in advance, and for all to see. Absent "misleading" guidance in the case of JAKKS Pacific (JAKK) and deliberate moves to not

---

<sup>2</sup> <http://www.valuentum.com/articles/20111126>

support the distribution in the case of Boardwalk Pipeline (BWP)--two very unusual cases--the Valuentum Dividend Cushion ratio hasn't missed identifying the risk related to a dividend cut across our 1,000+ company coverage universe, and it even picked up the risk associated with steady-eddy utility firm, Exelon.

Income investors know that a dividend cut could be disastrous to their portfolio, as future income is not only reduced, but it is also very likely that capital is permanently impaired. The Dividend Cushion ratio is designed to provide the income investor with a trusted and independent opinion of the safety and future growth potential of a firm's dividend. It not only predicts dividend cuts, but the 'cushion' behind the Valuentum Dividend Cushion reveals just how much capacity a firm has to continue growing its dividend into the future.

Technically speaking, the Dividend Cushion ratio considers the firm's net cash on its balance sheet (cash less long-term debt) and adds that to its forecasted future free cash flows (cash from operations less capital expenditures) and divides that sum by the firm's future expected cash dividend payments. At its core, it tells investors whether the firm has enough cash to pay out its dividends in the future, while considering its debt obligations. If a firm has a Dividend Cushion ratio above 1, it can cover its dividend, but if it falls below 1, trouble may be on the horizon.

The Dividend Cushion ratio is found within each firm's Dividend Report. We update our Dividend Reports on firms regularly, and we encourage members to check the Dividend Cushion scores on their income investments at least quarterly (in accordance with our update cycle).

### **What Causes Firms to Cut Their Dividends?**

When we were developing the Dividend Cushion ratio, we scoured our stock universe for firms that cut their dividends in the past to uncover the major drivers behind the dividend cut. This is what we found out: The major reasons why firms cut their dividends had to do with preserving cash in the midst of a secular or cyclical downturn in demand for their products/services or when faced with excessive leverage (how much debt they held on their respective balance sheets). Fundamental weakness often exacerbates financial (balance sheet) weakness, hurting cash available for dividends.

Let's walk through a few examples to become familiar with the qualities and Dividend Cushion ratios of companies that were at risk of a dividend cut. Having an understanding of some common characteristics of companies that have cut their dividend in the past may help investors avoid potential disappointments in the future. These examples represent real-time evidence of the Dividend Cushion ratio in action.

#### **Example #1: SuperValu (SVU): "A case of too much debt"**

From our analyst note, dated July 12, 2012<sup>3</sup>: “As we predicted several months ago, grocer SuperValu (SVU) announced on Wednesday that it will suspend its dividend in an effort to better allocate capital and start to reduce its enormous debt load. The company also reported that it plans to replace its current senior credit facility with one that will be backed by the company’s assets, thus allowing for increased flexibility and less stringent financial covenants. We applaud both moves as efforts to deleverage the firm’s balance sheet and ensure the firm’s long-term survival. The Dividend Cushion ratio predicted the dividend cut months ago.”

**Example #2: Roundy’s (RNDY): “Another case of too much debt”**

From Roundy’s third-quarter 2012 press release<sup>4</sup>, dated November 8, 2012: “Recognizing that the economy and competitive environment are likely to remain challenging into fiscal 2013, we are reducing our quarterly dividend to strengthen our balance sheet and increase our financial flexibility. We believe that it is in the best long-term interest of our shareholders as it will enable us to continue to invest in the business and expand our growth banner, Mariano’s, in the Chicago market, as well as provide cash flow to pay down debt.”

**Example #3: Dover Downs (DDE): “Facing declining demand”**

From Dover Downs’ fourth-quarter 2012 press release<sup>5</sup>, dated January 24, 2013: “Gaming revenue fell 21.4%...as a result of increased competition in the region...Gaming expansion in Maryland and Pennsylvania continues to depress gaming revenues in Delaware...Given the competitive environment and recent financial results, the Company’s Board of Directors has suspended the quarterly dividend.”

**Example #4: Strayer (STRA): “Another case of declining demand”**

From Strayer’s third-quarter 2012 press release<sup>6</sup>, dated November 9, 2012: “Revenues for the three months ended September 30, 2012 decreased 9% to \$124.3 million... Income from operations was \$7.8 million compared to \$24.4 million for the same period in 2011, a decrease of 68%... Net income was \$4.1 million compared to \$13.9 million for the same period in 2011, a decrease of 71%...The Company announced today that its Board of Directors declared a regular, quarterly cash dividend of \$1.00 per share to be paid on December 10, 2012 to shareholders of record as of November 26, 2012. The Company also announced that it does not currently intend to pay a regular quarterly dividend in 2013.”

**Example #5: Exelon (EXC): “Concern over balance sheet, leverage”**

---

<sup>3</sup> [http://www.valuentum.com/articles/20120712\\_2](http://www.valuentum.com/articles/20120712_2)

<sup>4</sup> <http://phx.corporate-ir.net/phoenix.zhtml?c=251227&p=irol-newsArticle&ID=1756522&highlight>

<sup>5</sup> <http://www.doverdowns.com/library/Investor%20Relations/DDE%204Q12%20Earnings.pdf>

<sup>6</sup> <http://www.strayereducation.com/releasedetail.cfm?ReleaseID=720081>

From our analyst note<sup>7</sup>, released February 8, 2013: “In its fourth-quarter earnings presentation slide deck, Exelon (EXC) announced that it would slash its quarterly dividend payout to \$0.31 per share (was \$0.525 per share) beginning in the second quarter of 2013. Valuentum members were well aware of the risks of the dividend cut long before it became apparent to the market. Our July 2012 dividend report on Exelon revealed a 0.3 Dividend Cushion score, and our October 2012 dividend report revealed a -0.1 Dividend Cushion score. Any Dividend Cushion score below 1 indicates that there is significant risk with respect to the long-term sustainability of a company's dividend.”

**Example #6: Cliffs Natural (CLF): “Declining demand and weak free cash flow”**

From our analyst note<sup>8</sup>, released February 13, 2013: "After we predicted a dividend cut in November 2012, Cliffs Natural Resources (CLF) finally cut its dividend after posting poor results for 2012. The firm slashed its quarterly payout 76% to \$0.15 per share...Results for Cliffs were actually a bit better than consensus estimates on both the revenue and earnings side. Total revenue declined 4% year-over-year to \$1.5 billion, while earnings dipped 59% year-over-year to \$0.62 per share (after adjusting for a \$1 billion goodwill impairment). Free cash flow for the year was incredibly weak, falling to a negative \$613 million, explaining why the dividend needed to be cut. If we only took into account the payout ratio, Cliffs' adjusted earnings per share of \$3.45 for 2012 would seem to give the dividend ample cushion (its prior annual dividend payout was \$2.50 per share, an adjusted payout ratio of 72.5%). However, Cliffs is a perfect example of the significant and potential tragic pitfalls of using the payout ratio as a measure of dividend safety and why the Dividend Cushion ratio is one of the most important metrics for income investors to use to safeguard their portfolios from dividend-growth blow-ups."

**Example #7: Pitney Bowes (PBI): “Another case of leverage”**

From Pitney Bowes' press release<sup>9</sup>, dated April 30, 2013: “In connection with the ongoing management of the Company's capital structure, The Board of Directors of Pitney Bowes Inc. (NYSE: PBI) approved a reduced second quarter dividend of 18.75 cents per share for the Company's common stock. The quarterly cash dividend is payable June 12, 2013, to stockholders of record on May 10, 2013. This action will provide the Company the added financial flexibility to invest in its business and enhance its capital structure, while continuing to provide a very competitive return to shareholders.”

**Example #8: CenturyLink (CTL): “Yet another case of too much debt.”**

From CenturyLink's press release, dated February 13, 2013: “In connection with the new repurchase program, the board also indicated its intention to revise the company's quarterly dividend rate to \$0.54 from \$0.725 per share. The board expects to approve this new rate at its

<sup>7</sup> [http://www.valuentum.com/articles/20130208\\_1](http://www.valuentum.com/articles/20130208_1)

<sup>8</sup> [http://www.valuentum.com/articles/20130213\\_2](http://www.valuentum.com/articles/20130213_2)

<sup>9</sup> <http://news.pb.com/press-releases/pitney-bowes-board-common-preference-preferred-stock-dividends.htm>

next regularly-scheduled meeting on February 26, 2013, with the change effective with the March 2013 quarterly dividend payment. CenturyLink also expects to utilize a portion of its free cash flow generated in 2013 and 2014 to repay debt and maintain leverage at less than 3.0 times EBITDA (earnings before interest, taxes, depreciation and amortization).”

### **The Valuentum Dividend Cushion Is the Income Investor’s Best Friend**

Income investors have a lot to analyze, but the effectiveness and simplicity of the Dividend Cushion ratio makes it a must-have investing tool. The foundation behind the measure--assessing cash flows relative to dividend payments in the context of a firm’s balance sheet--remains as relevant as ever. The support for the metric continues to increase with each dividend cut it predicts in advance.

*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.*

The information contained in this report is not represented or warranted to be accurate, correct, complete, or timely. This report is for informational purposes only and should not be considered a solicitation to buy or sell any security. The securities mentioned herein may not be suitable for all types of investors. The information contained in this report does not constitute any advice, and especially on the tax consequences of making any particular investment decision. This material is not intended for any specific type of investor and does not take into account an investor's particular investment objectives, financial situation or needs. This report is not intended as a recommendation of the security highlighted or any particular investment strategy. Before acting on any information found in this report, readers should consider whether such an investment is suitable for their particular circumstances, perform their own due-diligence, and if necessary, seek professional advice.

Assumptions, opinions, and estimates are based on our judgment as of the date of the report and are subject to change without notice. Valuentum is not responsible for any errors or omissions or for results obtained from the use of this report and accepts no liability for how readers may choose to utilize the content. In no event shall Valuentum be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the information contained in this document. Investors should consider this report as only a single factor in making their investment decision.

Valuentum is not a registered investment advisor, does not offer brokerage or investment banking services and adheres to professional standards and abides by formal codes of ethics that put the interests of clients and subscribers ahead of their own. As of the date of this report, Valuentum has not received any compensation from the company or companies highlighted in this report. Valuentum, its employees, and affiliates may have long, short or derivative positions in the stock or stocks mentioned herein. Redistribution is prohibited without written permission.

Valuentum's company-specific forecasts used in its discounted cash flow model are rules-based. These rules reflect the experience and opinions of Valuentum's analyst team. Historical data used in our valuation model is provided by Xignite and from other publicly available sources including annual and quarterly regulatory filings. Stock price and volume data is provided by Xignite. No warranty is made regarding the accuracy of any data or any opinions. Valuentum's valuation model is based on sound academic principles, and other forecasts in the model such as inflation and the equity risk premium are based on long-term averages. The Valuentum proprietary automated text-generation system creates text that will vary by company and may often change for the same company upon subsequent updates.

Valuentum uses its own proprietary stock investment style and industry classification systems. Peer companies are selected based on the opinions of the Valuentum analyst team. Research reports and data are updated periodically, though Valuentum assumes no obligation to update its reports, opinions, or data following publication in any form or format. Performance assessment of Valuentum metrics, including the Valuentum Buying Index, is ongoing, and we intend to update investors periodically, though Valuentum assumes no obligation to do so. Past performance is not a guarantee of future results. For general information about Valuentum's products and services, please contact us at [valuentum@valuentum.com](mailto:valuentum@valuentum.com).